

Table D-1

Soil Sample Summary - 2010

Nu-West Industries, Inc.

Conda Phosphate Operations Facility

Soda Springs, Idaho

Areas of Interest and Soil Boring Locations				Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Gross a & B	Rad Chem ^(e) Ra-226/228					
Ore Processing Area																
Hazardous Waste Storage Building																
SB-1	824120.39	392437.85	SB-01 (0-1)	0-1	8/13/2010	1151	X	X	X						INVE	
			SB-01 (1-2)	1-2	8/13/2010	1152	X	X	X	X		X			INVE	
			SB-01 (4-5)	4-5	8/13/2010	1154	X	X	X						INVE	
			SB-01 (9-10)	9-10	8/13/2010	1156								Hold	INVE	
			SB-01 (11-12)	11-12	8/13/2010	1200								Hold	INVE	Refusal at 12 feet bgs in basalt
SB-2	824082.42	392417.40	SB-02 (0-1)	0-1	8/12/2010	1300	X	X	X						INVE	
			SB-02 (1-2)	1-2	8/12/2010	1303	X	X	X	X					INVE	
			SB-102 (1-2)	1-2	8/12/2010	1230				X					DUP	
			SB-02 (4-5)	4-5	8/12/2010	1305	X	X	X						INVE	
			SB-02 (9-10)	9-10	8/12/2010	1307	X		X					Hold	INVE	
			SB-02 (11.5-12.5)	11.5-12.5	8/12/2010	1310	X		X					Hold	INVE	Refusal at 12.5 feet bgs in basalt
SB-3	824118.55	392396.86	SB-03 (0-1)	0-1	8/12/2010	1130	X	X	X						INVE	
			SB-03 (1-2)	1-2	8/12/2010	1131	X	X	X	X					INVE	
			SB-03 (4-5)	4-5	8/12/2010	1132	X	X	X						INVE	
			SB-03 (9-10)	9-10	8/12/2010	1135	X		X					Hold	INVE	
			SB-03 (12-13)	12-13	8/12/2010	1140	X		X					Hold	INVE	Refusal at 13.5 feet bgs in basalt
SB-4	824140.18	392416.10	SB-04 (0-1)	0-1	8/12/2010	1050	X	X	X						INVE	
			SB-04 (1-2)	1-2	8/12/2010	1054	X	X	X	X					INVE	
			SB-04 (4-5)	4-5	8/12/2010	1056	X	X	X						INVE	
			SB-104 (4-5)	4-5	8/12/2010	1001	X	X	X						DUP	
			SB-04 (9-10)	9-10	8/12/2010	1100	X		X					Hold	INVE	
			SB-04 (12-13)	12-13	8/12/2010	1110	X		X					Hold	INVE	Refusal at 13 feet bgs in basalt
North Sulfuric Acid Plant																
Neutralization tank & unloading																
SB-5	824289.38	391900.56	SB-05 (0-1)	0-1	8/6/2010	809	X	X	X						INVE	
			SB-05 (1-2)	1-2	8/6/2010	810	X	X	X	X			X		INVE	
			SB-05 (4-5)	4-5	8/6/2010	811	X	X	X						INVE	Textile Liner at 4.5 foot bgs
			SB-05 (9-10)	9-10	8/6/2010	813	X		X					Hold	INVE	
			SB-05 (14-15)	14-15	8/6/2010	815	X		X					Hold	INVE	
			SB-05 (19-20)	19-20	8/6/2010	817	X		X					Hold	INVE	
			SB-05 (21-22)	21-22	8/6/2010	820	X		X					Hold	INVE	Refusal at 21.75 feet bgs in weathered basalt
SB-6	824286.93	391773.72	SB-06 (0-1)	0-1	8/6/2010	905	X	X	X						INVE	
			SB-06 (1-2)	1-2	8/6/2010	906	X	X	X	X			X		INVE	
			SB-06 (4-5)	4-5	8/6/2010	907	X	X	X						INVE	
			SB-06 (9-10)	9-10	8/6/2010	915	X		X					Hold	INVE	
			SB-06 (14-15)	14-15	8/6/2010	920	X		X					Hold	INVE	
			SB-06 (18-19)	18-19	8/6/2010	930	X		X					Hold	INVE	Refusal at 19 feet bgs in weathered basalt

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Areas of Interest and Soil Boring Locations				Sample Information						Chemical Parameters			GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments	
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Gross a & B	Rad Chem ^(e) Ra-226/228						
North Sulfuric Acid Plant (continued)																	
Acid Plant Building	SB-7	824290.81	391669.72	SB-07 (0-1)	0-1	8/6/2010	1000	X	X	X					INVE		
				SB-107 (0-1)	0-1	8/6/2010	1200	X	X	X				DUP			
				SB-07 (1-2)	1-2	8/6/2010	1001	X	X	X	X			INVE			
				SB-07 (4-5)	4-5	8/6/2010	1003	X	X	X				INVE			
				SB-07 (9-10)	9-10	8/6/2010	1005	X		X				Hold	INVE		
				SB-07 (14-15)	14-15	8/6/2010	1007	X		X				Hold	INVE		
				SB-07 (18-19)	18-19	8/6/2010	1015	X		X				Hold	INVE	Refusal at 19.5 feet bgs in weathered basalt. Wet from 19 to 19.5 feet bgs	
SB-8	824405.73	391673.18	SB-08 (0-1)	0-1	8/4/2010	859	X	X	X				X		INVE		
			SB-08 (1-2)	1-2	8/4/2010	900	X	X	X				X		INVE		
			SB-108 (1-2)	1-2	8/4/2010	902				X		X		X		DUP	
			SB-08 (4-5)	4-5	8/4/2010	800	X	X	X					X		INVE	
			SB-08 (9-10)	9-10	8/4/2010	923	X		X					X	Hold	INVE	
			SB-08 (14-15)	14-15	8/4/2010	930	X		X					X	Hold	INVE	
			SB-08 (19-20)	19-20	8/4/2010	1015	X		X					X	Hold	INVE	Refusal at 21 feet bgs in weathered basalt
SB-9	824487.31	391762.59	SB-09 (0-1)	0-1	8/6/2010	829	X	X	X				X		INVE		
			SB-09 (1-2)	1-2	8/6/2010	830	X	X	X				X		INVE		
			SB-109 (1-2)	1-2	8/6/2010	800				X		X				DUP	
			SB-09 (4-5)	4-5	8/6/2010	835	X	X	X					X		INVE	
			SB-109 (4-5)	4-5	8/6/2010	800	X	X	X					X		DUP	
			SB-09 (9-10)	9-10	8/6/2010	840	X		X					X	Hold	INVE	
			SB-09 (14-15)	14-15	8/6/2010	845	X		X					X	Hold	INVE	
SB-09 (19-20)	19-20	8/6/2010	900	X		X					X	Hold	INVE	Refusal at 21 feet bgs in weathered basalt			
East Sulfuric Acid Plant																	
Control room and tanks																	
SB-10	824262.64	391570.58	SB-10 (0-1)	0-1	8/4/2010	1159	X	X	X						INVE		
			SB-10 (1-2)	1-2	8/4/2010	1200	X	X	X			X			INVE		
			SB-10 (4-5)	4-5	8/4/2010	1202	X	X	X						INVE		
			SB-10 (9-10)	9-10	8/4/2010	1205	X		X					Hold	INVE		
			SB-10 (14-15)	14-15	8/4/2010	1208	X		X					Hold	INVE	Refusal at 17.5 feet bgs in weathered basalt	
SB-11	824271.46	391516.27	SB-11 (0-1)	0-1	8/4/2010	1333	X	X	X						INVE		
			SB-111 (0-1)	0-1	8/4/2010	1230	X	X	X						DUP		
			SB-11 (1-2)	1-2	8/4/2010	1335	X	X	X			X			INVE		
			SB-11 (4-5)	4-5	8/4/2010	1337	X	X	X						INVE		
			SB-11 (9-10)	9-10	8/4/2010	1340	X		X					Hold	INVE		
SB-11 (12.5-13.5)	12.5-13.5	8/4/2010	1345	X		X						Hold	INVE	Refusal at 15.5 feet bgs in weathered basalt			
SB-12	824388.94	391528.69	SB-12 (0-1)	0-1	8/4/2010	1113	X	X	X						INVE		
			SB-12 (1-2)	1-2	8/4/2010	1115	X	X	X			X			INVE		
			SB-12 (4-5)	4-5	8/4/2010	1117	X	X	X						INVE		
			SB-12 (9-10)	9-10	8/4/2010	1120	X		X					Hold	INVE		
			SB-12 (14-15)	14-15	8/4/2010	1130	X		X					Hold	INVE	Refusal at 16.5 feet bgs in weathered basalt	

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Areas of Interest and Soil Boring Locations			Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228				
East Sulfuric Acid Plant (continued)	SB-13	824278.54	391434.67	SB-13 (0-1)	0-1	8/4/2010	1414	X	X	X				INVE	
				SB-13 (1-2)	1-2	8/4/2010	1415	X	X	X	X			INVE	
				SB-13 (4-5)	4-5	8/4/2010	1417	X	X	X				INVE	
				SB-13 (9-10)	9-10	8/4/2010	1420	X		X			Hold	INVE	
				SB-13 (14-15)	14-15	8/4/2010	1430	X		X			Hold	INVE	Refusal at 15.5 feet bgs in weathered basalt
	SB-14	824272.63	391339.71	SB-14 (0-1)	0-1	8/4/2010	1454	X	X	X				INVE	
				SB-14 (1-2)	1-2	8/4/2010	1455	X	X	X	X			INVE	
				SB-14 (4-5)	4-5	8/4/2010	1457	X	X	X				INVE	
				SB-14 (9-10)	9-10	8/4/2010	1500	X		X			Hold	INVE	
				SB-14 (14-15)	14-15	8/4/2010	1502	X		X			Hold	INVE	Refusal at 16 feet bgs in weathered basalt
	SB-15	824355.37	391310.14	SB-15 (0-1)	0-1	8/4/2010	1523	X	X	X				INVE	
				SB-15 (1-2)	1-2	8/4/2010	1525	X	X	X	X			INVE	
				SB-15 (4-5)	4-5	8/4/2010	1527	X	X	X				INVE	
				SB-15 (9-10)	9-10	8/4/2010	1529	X		X			Hold	INVE	
				SB-15 (14-15)	14-15	8/4/2010	1531	X		X			Hold	INVE	
				SB-15 (19-20)	19-20	8/4/2010	1535	X		X			Hold	INVE	
				SB-15 (24-25)	24-25	8/4/2010	1540	X		X			Hold	INVE	
				SB-15 (26-27)	26-27	8/4/2010	1610	X		X			Hold	INVE	Refusal at 28.5 feet bgs in weathered basalt; wet from 27-28.5 feet bgs
PPA Plant Control room and tanks	SB-16	824390.96	390986.06	SB-16 (0-1)	0-1	8/2/2010	1405	X	X	X				INVE	
				SB-16 (1-2)	1-2	8/2/2010	1410	X	X	X	X			INVE	
				SB-16 (4-5)	4-5	8/2/2010	1415	X	X	X				INVE	
				SB-16 (8-9)	8-9	8/2/2010	1420	X		X			Hold	INVE	Refusal at 9.5 feet bgs in weathered basalt
	SB-17	824356.34	390743.45	SB-17 (0-1)	0-1	8/2/2010	1528	X	X	X				INVE	
				SB-17 (1-2)	1-2	8/2/2010	1529	X	X	X	X			INVE	
				SB-17 (4-5)	4-5	8/2/2010	1530	X	X	X				INVE	
				SB-17 (9-10)	9-10	8/2/2010	1535	X					Hold	INVE	
				SB-17 (13-14)	14-15	8/2/2010	1537	X					Hold	INVE	Refusal at 14 feet bgs in weathered basalt
	SB-18	824394.03	390581.64	SB-18 (0-1)	0-1	8/2/2010	1604	X	X	X				INVE	
				SB-118 (0-1)	0-1	8/2/2010	1550	X	X	X				DUP	
				SB-18 (1-2)	1-2	8/2/2010	1605	X	X	X	X			INVE	
				SB-18 (4-5)	4-5	8/2/2010	1606	X	X	X				INVE	
				SB-18 (8.5-9.5)	8.5-9.5	8/2/2010	1608	X					Hold	INVE	Refusal at 9.5 feet bgs in weathered basalt

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Areas of Interest and Soil Boring Locations				Sample Information						Chemical Parameters			GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e)	Gross a & B	Ra-226/228				
South Ball Mill	SB-19	823892.81	392031.54	SB-19 (0-1)	0-1	8/9/2010	1450	X	X	X					INVE	textile liner at 1 foot bgs
				SB-19 (1-2)	1-2	8/9/2010	1455	X	X	X	X	X			INVE	
				SB-19 (4-5)	4-5	8/9/2010	1457	X	X	X					INVE	
				SB-19 (9-10)	9-10	8/9/2010	1500	X		X				Hold	INVE	
				SB-19 (14-15)	14-15	8/9/2010	1505	X		X				Hold	INVE	Refusal at 16 feet bgs in weathered basalt
	SB-20	823971.94	392033.59	SB-20 (0-1)	0-1	8/18/2010	1135	X	X	X					INVE	
				SB-20 (1-2)	1-2	8/18/2010	1137	X	X	X	X				INVE	
				SB-20 (4-5)	4-5	8/18/2010	1140	X	X	X					INVE	
				SB-20 (9-10)	9-10	8/18/2010	1145	X		X				Hold	INVE	
				SB-20 (13-14)	13-14	8/18/2010	1147	X		X				Hold	INVE	Refusal at 14 feet bgs in basalt
	SB-21	824070.17	391991.85	SB-21 (0-1)	0-1	8/9/2010	1405	X	X	X					INVE	
				SB-21 (1-2)	1-2	8/9/2010	1407	X	X	X	X				INVE	
				SB-21 (4-5)	4-5	8/9/2010	1410	X	X	X					INVE	
				SB-121 (4-5)	4-5	8/9/2010	1345	X	X	X					DUP	
				SB-21 (9-10)	9-10	8/9/2010	1415	X		X				Hold	INVE	
				SB-21 (14-15)	14-15	8/9/2010	1420	X		X				Hold	INVE	
				SB-21 (15.5-16.5)	15.5-16.5	8/9/2010	1425	X		X				Hold	INVE	Refusal at 16.5 feet bgs in weathered basalt
Phosphoric and Super Phosphoric Acid Area North SPA Area	SB-22	824128.88	391851.56	SB-22 (0-1)	0-1	8/9/2010	1150	X	X	X					INVE	
				SB-22 (1-2)	1-2	8/9/2010	1152	X	X	X	X				INVE	
				SB-22 (4-5)	4-5	8/9/2010	1154	X	X	X					INVE	
				SB-22 (9-10)	9-10	8/9/2010	1158	X		X				Hold	INVE	
				SB-22 (14-15)	14-15	8/9/2010	1200	X		X				Hold	INVE	
				SB-22 (15.5-16.5)	15.5-16.5	8/9/2010	1205	X		X				Hold	INVE	Refusal at 18 feet bgs in weathered basalt
	SB-23	824082.66	391849.09	SB-23 (0-1)	0-1	8/9/2010	1320	X	X	X					INVE	
				SB-23 (1-2)	1-2	8/9/2010	1323	X	X	X	X				INVE	
				SB-23 (2.5-3.5)	2.5-3.5	8/9/2010	1325	X	X	X					INVE	Liner at 1.5 feet bgs; Refusal at 3.5 feet bgs in silt
	SB-24	824095.21	391786.97	SB-24 (0-1)	0-1	8/9/2010	1030	X	X	X					INVE	textile liner at 1 foot bgs
				SB-24 (1-2)	1-2	8/9/2010	1040	X	X	X	X	X			INVE	
				SB-24 (4-5)	4-5	8/9/2010	1045	X	X	X					INVE	
				SB-24 (6-7)	6-7	8/9/2010	1050	X		X				Hold	INVE	Refusal at 7 feet bgs in silt
South Car Wash Sump Area	SB-25	-	-	-	-	-	-								-	Location omitted; inaccessible
	SB-26	824161.97	391755.83	SB-26 (0-1)	0-1	8/18/2010	1425	X	X	X					INVE	
				SB-26 (1-2)	1-2	8/18/2010	1427	X	X	X	X				INVE	
				SB-26 (4-5)	4-5	8/18/2010	1430	X	X	X					INVE	
				SB-26 (7-8)	7-8	8/18/2010	1435	X	X	X					INVE	Refusal at 8 feet bgs in silt

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Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228				
Phosphoric and Super Phosphoric Acid Area (continued)															
SPA Ditch															
SB-27	824075.64	391733.92	SB-27 (0-1)	0-1	8/9/2010	900	X	X	X					INVE	Textile Liner at 1 foot bgs
			SB-127 (0-1)	0-1	8/9/2010	800	X	X	X				DUP		
			SB-27 (1-2)	1-2	8/9/2010	905	X	X	X	X			INVE		
			SB-127 (1-2)	1-2	8/9/2010	800				X			DUP		
			SB-27 (4-5)	4-5	8/9/2010	910	X	X	X				INVE		
			SB-27 (8-9)	8-9	8/9/2010	940	X		X			Hold	INVE	Refusal at 9 feet bgs in silt	
SB-28	824073.22	391676.55	SB-28 (0-1)	0-1	8/5/2010	1529	X	X	X				INVE	Textile Liner at 1 foot bgs	
			SB-28 (1-2)	1-2	8/5/2010	1530	X	X	X	X			INVE		
			SB-28 (3.5-4.5)	3.5-4.5	8/5/2010	1531	X	X	X				INVE	Refusal at 4.5 feet bgs in silty sand	
SB-29	824070.80	391614.09	SB-29 (0-1)	0-1	8/5/2010	1445	X	X	X				INVE	Textile Liner at 1 foot bgs	
			SB-29 (1-2)	1-2	8/5/2010	1450	X	X	X	X			INVE		
			SB-29 (4-5)	4-5	8/5/2010	1455	X	X	X				INVE		
			SB-29 (8-9)	8-9	8/5/2010	1505	X		X			Hold	INVE	Refusal at 9 feet bgs in silty sand	
SB-30	824078.32	391534.12	SB-30 (0-1)	0-1	8/5/2010	1104	X	X	X				INVE		
			SB-30 (1-2)	1-2	8/5/2010	1105	X	X	X	X			INVE	Textile liner at 2 feet bgs	
			SB-30 (4-5)	4-5	8/5/2010	1106	X	X	X				INVE	Refusal at 5 feet bgs in dense fill material	
SPA Building															
SB-31	824101.76	391550.45	SB-31 (0-1)	0-1	8/5/2010	1409	X	X	X				INVE	Textile Liner at 1 foot bgs	
			SB-31 (1-2)	1-2	8/5/2010	1410	X	X	X	X			INVE		
			SB-131 (1-2)	1-2	8/5/2010	1330	X	X	X				DUP		
			SB-31 (4-5)	4-5	8/5/2010	1411	X	X	X				INVE		
			SB-31 (9-10)	9-10	8/5/2010	1413	X		X			Hold	INVE	Refusal at 11 feet bgs in silt	
SB-32	824158.81	391548.21	SB-32 (0-1)	0-1	8/5/2010	1225	X	X	X				INVE	Textile Liner at 1 foot bgs	
			SB-32 (1-2)	1-2	8/5/2010	1227	X	X	X	X			INVE		
			SB-32 (4-5)	4-5	8/5/2010	1229	X	X	X				INVE		
			SB-32 (7-8)	7-8	8/5/2010	1234	X		X			Hold	INVE		
			SB-32 (14-15)	14-15	8/5/2010	1250	X		X			Hold	INVE	Refusal at 16.5 feet bgs in weathered basalt	
North Car Wash Sump Area															
SB-33	824182.99	391985.43	SB-33 (0-1)	0-1	8/18/2010	1350	X	X	X				INVE		
			SB-33 (1-2)	1-2	8/18/2010	1355	X	X	X	X			INVE		
			SB-33 (3.5-4)	3.5-4	8/18/2010	1400	X	X	X				INVE	Hand auger refusal at 4 feet bgs on gravel	
SB-34	824172.36	392031.72	SB-134 (0-1)	0-1	8/18/2010	1230	X	X	X				DUP	Sample not analyzed (duplicate)	
			SB-34 (0-1)	0-1	8/18/2010	1255	X	X	X				INVE		
			SB-34 (1-2.5)	1-2.5	8/18/2010	1257	X	X	X	X			INVE		
			SB-34 (4-5)	4-5	8/18/2010	1300	X	X	X				INVE		
			SB-34 (9-10)	9-10	8/18/2010	1305	X	X	X				INVE		
			SB-34 (14-15)	14-15	8/18/2010	1310	X		X			Hold	INVE		
			SB-34 (19-20)	19-20	8/18/2010	1315	X		X			Hold	INVE		
			SB-34 (24-25)	24-25	8/18/2010	1320	X		X			Hold	INVE	Refusal at 29 feet bgs in basalt; wet at 26 feet bgs	

Table D-1
Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations				Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments	
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228						
Central Tank Farm Area																	
Central Tank Farm	SB-35	823854.58	391671.02	SB-35 (0-1)	0-1	8/17/2010	1421	X	X	X					INVE		
				SB-35 (1-2)	1-2	8/17/2010	1423	X	X	X		X		X		INVE	
				SB-35 (4-5)	4-5	8/17/2010	1425	X	X	X						INVE	
				SB-135 (4-5)	4-5	8/17/2010	1411	X	X	X						DUP	
				SB-35 (9-10)	9-10	8/17/2010	1430	X		X					Hold	INVE	
				SB-35 (14-15)	14-15	8/17/2010	1435	X		X					Hold	INVE	Refusal at 15 feet bgs in silt
SB-36	823885.84	391559.76	SB-36 (0-1)	0-1	8/17/2010	1143	X	X	X					INVE			
			SB-36 (1-2)	1-2	8/17/2010	1145	X	X	X		X			INVE			
			SB-36 (4-5)	4-5	8/17/2010	1147	X	X	X					INVE	Refusal at 5 feet bgs in silt		
SB-37	823931.69	391549.23	SB-37 (0-1)	0-1	8/17/2010	1051	X	X	X					INVE			
			SB-137 (0-1)	0-1	8/17/2010	1031	X	X	X					DUP			
			SB-37 (1-2)	1-2	8/17/2010	1053	X	X	X		X			INVE			
			SB-137 (1-2)	1-2	8/17/2010	1033	X	X	X		X			DUP			
			SB-37 (4-5)	4-5	8/17/2010	1055	X	X	X					INVE	Refusal at 5 feet bgs in silt		
			SB-137 (4-5)	4-5	8/17/2010	1035	X	X	X					DUP			
SB-38	824016.53	391542.26	SB-38 (0-1)	0-1	8/17/2010	1017	X	X	X					INVE			
			SB-38 (1-2)	1-2	8/17/2010	1020	X	X	X		X			INVE			
			SB-38 (4-5)	4-5	8/17/2010	1022	X	X	X					INVE	Refusal at 5.25 feet bgs in silt		
Oxidation Tank Farm Area																	
SB-39	823982.56	391518.83	SB-39 (0-1)	0-1	8/17/2010	950	X	X	X					INVE			
			SB-39 (1-2)	1-2	8/17/2010	952	X	X	X		X		X		INVE		
			SB-39 (4-5)	4-5	8/17/2010	955	X	X	X					INVE	Refusal at 5 feet bgs in silt; sample container not intact and thus not analyzed		
SB-40	823887.20	391491.88	SB-40 (0-1)	0-1	8/10/2010	1601	X	X	X					INVE			
			SB-40 (1-2)	1-2	8/10/2010	1602	X	X	X		X			INVE			
			SB-40 (4-5)	4-5	8/10/2010	1604	X	X	X					INVE			
			SB-140 (4-5)	4-5	8/10/2010	1730	X	X	X					DUP			
			SB-40 (9-10)	9-10	8/10/2010	1610	X		X					Hold	INVE		
			SB-40 (11.5-12.5)	11.5-12.5	8/10/2010	1615	X		X					Hold	INVE	Refusal at 12.5 feet bgs in silt	
SB-41	823984.52	391365.73	SB-41 (0-1)	0-1	8/10/2010	1519	X	X	X					INVE			
			SB-41 (1-2)	1-2	8/10/2010	1521	X	X	X		X			INVE			
			SB-41 (4-5)	4-5	8/10/2010	1525	X	X	X					INVE			
			SB-41 (9-10)	9-10	8/10/2010	1530	X		X					Hold	INVE		
			SB-41 (14-15)	14-15	8/10/2010	1535	X		X					Hold	INVE		
			SB-41 (17.5-18.5)	17.5-18.5	8/10/2010	1537	X		X					Hold	INVE	Refusal at 18.5 feet bgs in silt	
SB-42	824025.60	391312.63	SB-42 (0-1)	0-1	8/13/2010	1650	X	X	X					INVE			
			SB-42 (1-2)	1-2	8/13/2010	1653	X	X	X		X			INVE			
			SB-42 (4-5)	4-5	8/13/2010	1655	X	X	X					INVE			
			SB-42 (9-10)	9-10	8/13/2010	1659	X		X					Hold	INVE		
			SB-42 (14-15)	14-15	8/13/2010	1705	X		X					Hold	INVE		
			SB-42 (19-20)	19-20	8/13/2010	1710	X		X					Hold	INVE		
			SB-42 (24-25)	24-25	8/13/2010	1720	X		X					Hold	INVE	Refuesed at 25.5 feet in basalt	

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Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations			Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Eastings	Northings	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228				
Oxidation Tank Farm Area (continued)															
SB-43	824084.42	391424.48	SB-43 (0-1)	0-1	8/5/2010	1019	X	X	X						INVE
			SB-43 (1-2)	1-2	8/5/2010	1020	X	X	X	X					INVE
			SB-43 (4-5)	4-5	8/5/2010	1021	X	X	X						INVE
			SB-43 (9-10)	9-10	8/5/2010	1023	X		X				Hold		INVE
			SB-43 (14-15)	14-15	8/5/2010	1030	X		X				Hold		INVE
			SB-43 (17.5-18.5)	17.5-18.5	8/5/2010	1035	X		X				Hold		INVE
															Refusal at 18.5 in weathered basalt
West Sulfuric Acid Plant															
West Shop															
SB-44	823900.78	391392.47	SB-44 (0-1)	0-1	8/10/2010	1442	X	X	X						INVE
			SB-44 (1-2)	1-2	8/10/2010	1444	X	X	X	X					INVE
			SB-144 (1-2)	1-2	8/10/2010	1400	X	X	X						DUP
			SB-44 (4-5)	4-5	8/10/2010	1446	X	X	X						INVE
			SB-44 (9-10)	9-10	8/10/2010	1420	X		X				Hold		INVE
			SB-44 (14-15)	14-15	8/10/2010	1430	X		X				Hold		INVE
			SB-44 (16.5-17.5)	16.5-17.5	8/10/2010	1440	X		X				Hold		INVE
															Refusal at 18 in weathered basalt
Granulation Area															
Granulation Building															
SB-45	824138.42	391153.93	SB-45 (0-1)	0-1	8/16/2010	1425	X	X	X						INVE
			SB-45 (1-2)	1-2	8/16/2010	1430	X	X	X	X		X			INVE
			SB-45 (4-5)	4-5	8/16/2010	1435	X	X	X						INVE
			SB-45 (9-10)	9-10	8/16/2010	1515	X		X				Hold		INVE
			SB-45 (14-15)	14-15	8/16/2010	1520	X		X				Hold		INVE
			SB-45 (19-20)	19-20	8/16/2010	1530	X		X				Hold		INVE
			SB-45 (23-24)	23-24	8/16/2010	1545	X		X				Hold		INVE
															Refusal at 24 feet bgs in basalt
SB-46	824030.19	391222.32	SB-46 (0-1)	0-1	8/16/2010	1315	X	X	X						INVE
			SB-46 (1-2)	1-2	8/16/2010	1320	X	X	X	X					INVE
			SB-46 (4-5)	4-5	8/16/2010	1330	X	X	X						INVE
			SB-146 (4-5)	4-5	8/16/2010	1210	X	X	X						DUP
			SB-46 (9-10)	9-10	8/16/2010	1333	X		X				Hold		INVE
			SB-46 (14-15)	14-15	8/16/2010	1335	X		X				Hold		INVE
			SB-46 (15-16)	15-16	8/16/2010	1340	X		X				Hold		INVE
															Refusal at 16 feet bgs in basalt
SB-47	824003.71	391136.61	SB-47 (0-1)	0-1	8/12/2010	1435	X	X	X						INVE
			SB-147 (0-1)	0-1	8/12/2010	1330	X	X	X						DUP
			SB-47 (1-2)	1-2	8/12/2010	1437	X	X	X	X		X			INVE
			SB-47 (4-5)	4-5	8/12/2010	1439	X	X	X						INVE
			SB-47 (9-10)	9-10	8/12/2010	1444	X		X				Hold		INVE
															Refusal at 13 feet bgs in basalt; no recovery 10 to 13 feet bgs
SB-48	824026.77	391097.51	SB-48 (0-1)	0-1	8/12/2010	1517	X	X	X						INVE
			SB-48 (1-2)	1-2	8/12/2010	1519	X	X	X	X					INVE
			SB-48 (4-5)	4-5	8/12/2010	1521	X	X	X						INVE
			SB-48 (9-10)	9-10	8/12/2010	1525	X		X				Hold		INVE
			SB-48 (14-15)	14-15	8/12/2010	1530	X		X				Hold		INVE
															Refusal at 15 feet bgs in basalt
SB-49	824018.76	391044.32	SB-49 (0-1)	0-1	8/12/2010	1550	X	X	X						INVE
			SB-49 (1-2)	1-2	8/12/2010	1551	X	X	X	X					INVE
			SB-49 (4-5)	4-5	8/12/2010	1553	X	X	X						INVE
			SB-49 (9-10)	9-10	8/12/2010	1600	X		X				Hold		INVE
			SB-49 (11-12)	11-12	8/12/2010	1605	X		X				Hold		INVE
															Refusal at 12.5 feet bgs in basalt

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Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations				Sample Information						Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments						
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228										
Process Sewer Lagoon Area																					
North of Lagoon	SB-50	823644.05	392077.42	SB-50 (0-1)	0-1	8/18/2010	1010	X	X	X	X			INVE							
				SB-50 (1-2)	1-2	8/18/2010	1012	X	X	X						INVE					
				SB-50 (4-5)	4-5	8/18/2010	1015	X	X	X						INVE					
				SB-50 (9-10)	9-10	8/18/2010	1020	X	X	X						INVE					
				SB-50 (13-14)	13-14	8/18/2010	1024	X	X	X						INVE	Refusal at 14 feet bgs in basalt				
	SB-51	823766.88	392085.62	SB-51 (0-1)	0-1	8/18/2010	1055	X	X	X	X			INVE							
				SB-51 (1-2)	1-2	8/18/2010	1057	X	X	X				INVE							
				SB-51 (2-3)	2-3	8/18/2010	1100	X	X	X				INVE		Hand auger refusal at 3 feet bgs					
	SB-52	823812.42	392012.66	SB-52 (0-1)	0-1	8/17/2010	1550	X	X	X	X			INVE							
				SB-52 (1-2)	1-2	8/17/2010	1554	X	X	X				INVE							
				SB-52 (4-5)	4-5	8/17/2010	1557	X	X	X				INVE							
				SB-52 (9-10)	9-10	8/17/2010	1600	X	X	X				INVE							
				SB-52 (14-15)	14-15	8/17/2010	1602	X	X	X				INVE							
				SB-52 (19-20)	19-20	8/17/2010	1605	X	X	X				INVE							
				SB-52 (23-24)	23-24	8/17/2010	1615	X	X	X				INVE		Refusal at 24 feet bgs in silt					
	Process Sewer Lagoon Sump																				
	SB-53	823829.23	391891.67	SB-53 (0-1)	0-1	8/18/2010	931	X	X	X	X			INVE							
				SB-53 (1-2)	1-2	8/18/2010	934	X	X	X				INVE							
SB-53 (4-5)				4-5	8/18/2010	937	X	X	X	INVE											
SB-53 (9-10)				9-10	8/18/2010	940	X	X	X	INVE											
SB-53 (14-15)				14-15	8/18/2010	945	X	X	X	INVE											
SB-153 (14-15)				14-15	8/18/2010	939	X	X	X	DUP											
SB-53 (16-17)				16-17	8/18/2010	950	X	X	X	INVE				Refusal at 17 feet bgs in basalt							
SB-54				823829.19	391858.09	SB-54 (0-1)	0-1	8/18/2010	850	X				X		X	X		X	INVE	
						SB-54 (1-2)	1-2	8/18/2010	853	X				X		X				INVE	
						SB-54 (4-5)	4-5	8/18/2010	856	X				X		X				INVE	
						SB-54 (9-10)	9-10	8/18/2010	859	X				X		X				INVE	
						SB-154 (9-10)	9-10	8/18/2010	847	X				X		X				DUP	
						SB-54 (14-15)	14-15	8/18/2010	905	X				X		X				INVE	
	SB-54 (17-18)	17-18	8/18/2010			910	X	X	X	INVE	Refusal at 17 feet bgs in basalt										
Process Sewer Lagoon																					
SB-55	823678.95	391972.88	SB-55 (0-1)	0-1	8/9/2010	1525	X	X	X	X			INVE								
			SB-55 (1-2)	1-2	8/9/2010	1527	X	X	X				INVE								
			SB-55 (4-5)	4-5	8/9/2010	1530	X	X	X				INVE								
			SB-55 (9-10)	9-10	8/9/2010	1535	X	X	X				INVE								
			SB-55 (14-15)	14-15	8/9/2010	1540	X	X	X				INVE								
			SB-55 (19-20)	19-20	8/9/2010	1543	X	X	X				INVE								
			SB-55 (24.5-25.5)	24.5-25.5	8/9/2010	1547	X	X	X				INVE		Refusal at 25.5 feet bgs in basalt						

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Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations			Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments	
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228					
Process Sewer Lagoon Area (continued)																
SB-56	823696.69	391871.27	SB-56 (0-1)	0-1	8/10/2010	813	X	X	X					INVE		
			SB-56 (1-2)	1-2	8/10/2010	815	X	X	X		X			INVE		
			SB-56 (4-5)	4-5	8/10/2010	817	X	X	X					INVE		
			SB-56 (9-10)	9-10	8/10/2010	821	X	X	X					INVE		
			SB-156 (9-10)	9-10	8/10/2010	730	X	X	X					DUP		
			SB-56 (14-15)	14-15	8/10/2010	830	X	X	X					INVE		
			SB-56 (18.5-19.5)	18.5-19.5	8/10/2010	835	X		X					Hold	INVE	Refusal at 19.5 feet bgs in weathered basalt
SB-57	823722.24	391810.93	SB-57 (0-1)	0-1	8/10/2010	900	X	X	X					INVE		
			SB-57 (1-2)	1-2	8/10/2010	902	X	X	X		X			INVE		
			SB-157 (1-2)	1-2	8/10/2010	845					X			DUP		
			SB-57 (4-5)	4-5	8/10/2010	905	X	X	X					INVE		
			SB-57 (9-10)	9-10	8/10/2010	910	X	X	X					INVE		
			SB-57 (14-15)	14-15	8/10/2010	915	X	X	X					INVE		
			SB-57 (19-20)	19-20	8/10/2010	920	X		X					Hold	INVE	
SB-57 (24-25)	24-25	8/10/2010	925	X		X					Hold	INVE	Refusal at 26 feet bgs in weathered basalt			
SB-58	823793.02	391813.73	SB-58 (0-1)	0-1	8/10/2010	1209	X	X	X					INVE		
			SB-58 (1-2)	1-2	8/10/2010	1210	X	X	X		X			INVE		
			SB-58 (4-5)	4-5	8/10/2010	1211	X	X	X					INVE		
			SB-58 (9-10)	9-10	8/10/2010	1212	X	X	X					INVE		
			SB-58 (14-15)	14-15	8/10/2010	1213	X	X	X					INVE	Refusal at 19 in weathered basalt; wet at 16 feet bgs.	
			SB-158 (14-15)	14-15	8/10/2010	1215	X	X	X					DUP		
Dry Products Storage & East Ditch																
East Ditch																
SB-59	823846.00	391737.11	SB-59 (0-1)	0-1	8/17/2010	1525	X	X	X					INVE		
			SB-59 (1-2)	1-2	8/17/2010	1527	X	X	X		X			INVE		
			SB-159 (1-2)	1-2	8/17/2010	1500					X			DUP		
			SB-59 (4-5)	4-5	8/17/2010	1530	X	X	X					INVE	Refusal at 5 feet bgs in slag	
SB-60	823851.98	391618.67	SB-60 (0-1)	0-1	8/17/2010	1355	X	X	X					INVE		
			SB-60 (1-2)	1-2	8/17/2010	1358	X	X	X		X			INVE		
			SB-60 (4-5)	4-5	8/17/2010	1400	X	X	X					INVE		
			SB-60 (6-7)	6-7	8/17/2010	1402	X		X					Hold	INVE	Refusal at 7 feet bgs in lithfied silt
SB-61	823856.55	391527.31	SB-61 (0-1)	0-1	8/17/2010	1330	X	X	X					INVE		
			SB-61 (1-2)	1-2	8/17/2010	1335	X	X	X		X			INVE		
			SB-61 (4-5)	4-5	8/17/2010	1400	X	X	X					INVE		
			SB-61 (5.5-6.5)	5.5-6.5	8/17/2010	1402	X		X					Hold	INVE	Refusal at 6.5 feet bgs in silt/tufa
SB-62	823883.23	391428.02	SB-62 (0-1)	0-1	8/17/2010	900	X	X	X					INVE		
			SB-62 (1-2)	1-2	8/17/2010	902	X	X	X		X			INVE		
			SB-62 (4-5)	4-5	8/17/2010	905	X	X	X					INVE		
			SB-62 (9-10)	9-10	8/17/2010	910	X		X					Hold	INVE	
			SB-62 (14-15)	14-15	8/17/2010	920	X		X					Hold	INVE	
			SB-62 (19-20)	19-20	8/17/2010	925	X		X					Hold	INVE	Refusal at 20 feet bgs in basalt

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Soil Sample Summary - 2010

Nu-West Industries, Inc.

Conda Phosphate Operations Facility

Soda Springs, Idaho

Areas of Interest and Soil Boring Locations				Sample Information						Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments	
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228					
Dry Products Storage & East Ditch (continued)																
North End of Building																
SB-63	823692.41	391767.39	SB-63 (0-1)	0-1	8/10/2010	955	X	X	X						INVE	
			SB-63 (1-2)	1-2	8/10/2010	957	X	X	X		X				INVE	
			SB-63 (4-5)	4-5	8/10/2010	959	X	X	X						INVE	
			SB-63 (9-10)	9-10	8/10/2010	1005	X		X					Hold	INVE	
			SB-63 (14-15)	14-15	8/10/2010	1010	X		X					Hold	INVE	
			SB-63 (19-20)	19-20	8/10/2010	1130	X		X					Hold	INVE	Refusal at 22 in weathered basalt
SB-64	823804.17	391778.33	SB-64 (0-1)	0-1	8/10/2010	1330	X	X	X						INVE	
			SB-64 (1-2)	1-2	8/10/2010	1334	X	X	X		X	X			INVE	
			SB-64 (4-5)	4-5	8/10/2010	1336	X	X	X						INVE	
			SB-64 (9-10)	9-10	8/10/2010	1340	X		X					Hold	INVE	
			SB-64 (14-15)	14-15	8/10/2010	1345	X		X					Hold	INVE	
			SB-64 (19-20)	16-17	8/10/2010	1350	X		X					Hold	INVE	Refusal at 17.5 in weathered basalt
Loading Area																
SB-65	823642.34	391185.64	SB-65 (0-1)	0-1	8/13/2010	805	X	X	X						INVE	
			SB-65 (1-2)	1-2	8/13/2010	810	X	X	X		X				INVE	
			SB-65 (4-5)	4-5	8/13/2010	812	X	X	X						INVE	
			SB-65 (9-10)	9-10	8/13/2010	819	X		X					Hold	INVE	
			SB-65 (14-15)	14-15	8/13/2010	822	X		X					Hold	INVE	
			SB-65 (19-20)	19-20	8/13/2010	825	X		X					Hold	INVE	Refusal at 20.5 feet bgs in weathered basalt
SB-66	823613.02	391134.05	SB-66 (0-1)	0-1	8/13/2010	945	X	X	X						INVE	
			SB-66 (1-2)	1-2	8/13/2010	947	X	X	X		X				INVE	
			SB-66 (4-5)	4-5	8/13/2010	950	X	X	X						INVE	
			SB-66 (9-10)	9-10	8/13/2010	953	X		X					Hold	INVE	
			SB-66 (14-15)	14-15	8/13/2010	956	X		X					Hold	INVE	
			SB-66 (19-20)	19-20	8/13/2010	1000	X		X					Hold	INVE	
SB-67	823645.82	391086.70	SB-66 (20-21)	20-21	8/13/2010	1005	X		X					Hold	INVE	Refusal at 21 feet bgs in weathered basalt
			SB-67 (0-1)	0-1	8/13/2010	900	X	X	X						INVE	
			SB-67 (1-2)	1-2	8/13/2010	901	X	X	X		X	X			INVE	
			SB-67 (4-5)	4-5	8/13/2010	903	X	X	X						INVE	
			SB-67 (9-10)	9-10	8/13/2010	905	X		X					Hold	INVE	
			SB-67 (14-15)	14-15	8/13/2010	907	X		X					Hold	INVE	
SB-67	823645.82	391086.70	SB-67 (19-20)	19-20	8/13/2010	910	X		X					Hold	INVE	
			SB-67 (22-23)	22-23	8/13/2010	912	X		X					Hold	INVE	Refusal at 23 feet bgs in weathered basalt

Table D-1

Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations			Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments	
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228					
Dry Products Storage & East Ditch (continued)																
East and South of Building																
SB-68	823846.78	391240.62	SB-68 (0-1)	0-1	8/16/2010	1010	X	X	X						INVE	
			SB-68 (1-2)	1-2	8/16/2010	1012	X	X	X		X				INVE	
			SB-68 (4-5)	4-5	8/16/2010	1015	X	X	X						INVE	
			SB-68 (9-10)	9-10	8/16/2010	1017	X		X					Hold	INVE	
			SB-68 (14-15)	14-15	8/16/2010	1020	X		X					Hold	INVE	
			SB-68 (19-20)	19-20	8/16/2010	1023	X		X					Hold	INVE	
			SB-68 (21.5-22.5)	21.5-22.5	8/16/2010	1027	X		X					Hold	INVE	Refusal at 23 feet bgs in basalt
SB-69	823855.91	391044.90	SB-69 (0-1)	0-1	8/16/2010	1120	X	X	X						INVE	
			SB-69 (1-2)	1-2	8/16/2010	1123	X	X	X		X		X		INVE	
			SB-69 (4-5)	4-5	8/16/2010	1126	X	X	X						INVE	
			SB-69 (9-10)	9-10	8/16/2010	1129	X		X					Hold	INVE	
			SB-69 (14-15)	14-15	8/16/2010	1131	X		X					Hold	INVE	
			SB-69 (19-20)	19-20	8/16/2010	1135	X		X					Hold	INVE	
			SB-69 (20-21)	20-21	8/16/2010	1140	X		X					Hold	INVE	Refusal at 21 feet bgs in basalt
SB-70	823846.13	390749.19	SB-70 (0-1)	0-1	8/13/2010	1100	X	X	X						INVE	
			SB-70 (1-2)	1-2	8/13/2010	1101	X	X	X		X				INVE	
			SB-70 (4-5)	4-5	8/13/2010	1103	X	X	X						INVE	
			SB-70 (6.5-7.5)	6.5-7.5	8/13/2010	1107	X		X					Hold	INVE	Refusal at 7.5 feet bgs in weathered basalt
SB-71	823764.42	390666.61	SB-171 (0-1)	0-1	8/16/2010	800	X	X	X						DUP	
			SB-71 (0-1)	0-1	8/16/2010	900	X	X	X						INVE	
			SB-71 (1-2)	1-2	8/16/2010	905	X	X	X		X				INVE	
			SB-171 (1-2)	1-2	8/16/2010	906					X				DUP	
			SB-71 (4-5)	4-5	8/16/2010	907	X	X	X						INVE	
			SB-71 (5-6)	5-6	8/16/2010	910	X		X					Hold	INVE	Refusal at 7.5 feet bgs in weathered basalt
Production Well NW-9																
SB-72	823969.87	390013.37	SB-72 (0-1)	0-1	8/3/2010	930	X	X	X						INVE	All locations moved to the west versus work plan drawing based on location of well NW-9.
			SB-72 (1-2)	1-2	8/3/2010	932	X	X	X		X				INVE	
			SB-72 (4-5)	4-5	8/3/2010	934	X	X	X						INVE	
			SB-72 (9-10)	9-10	8/3/2010	936	X		X					Hold	INVE	
			SB-72 (14-15)	14-15	8/3/2010	938	X		X					Hold	INVE	
			SB-72 (19-20)	19-20	8/3/2010	940	X		X					Hold	INVE	
			SB-72 (24-25)	24-25	8/3/2010	942	X		X					Hold	INVE	
			SB-72 (29-30)	29-30	8/3/2010	948	X		X					Hold	INVE	
			SB-72 (31-32)	31-32	8/3/2010	950	X		X					Hold	INVE	Refusal at 32 feet bgs in weathered basalt

Table D-1

Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations			Sample Information							Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Eastng	Northng	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228				
Production Well NW-9 (continued)	SB-73	824092.05	389877.34	SB-73 (0-1)	0-1	8/3/2010	1025	X	X	X				INVE	
				SB-73 (1-2)	1-2	8/3/2010	1027	X	X	X	X			INVE	
				SB-73 (4-5)	4-5	8/3/2010	1029	X	X	X				INVE	
				SB-73 (9-10)	9-10	8/3/2010	1031	X		X			Hold	INVE	
				SB-73 (14-15)	14-15	8/3/2010	1048	X		X			Hold	INVE	
				SB-73 (19-20)	19-20	8/3/2010	1052	X		X			Hold	INVE	
				SB-73 (24-25)	24-25	8/3/2010	1055	X		X			Hold	INVE	
				SB-73 (29-30)	29-30	8/3/2010	1057	X		X			Hold	INVE	
				SB-73 (31.5-32.5)	31.5-32.5	8/3/2010	1100	X		X			Hold	INVE	Refusal at 32.5 feet bgs in basalt
SB-74	823880.04	389922.60		SB-74 (0-1)	0-1	8/3/2010	1130	X	X	X				INVE	
				SB-74 (1-2)	1-2	8/3/2010	1131	X	X	X	X			INVE	
				SB-174 (1-2)	1-2	8/3/2010	1115	X	X	X				DUP	
				SB-74 (4-5)	4-5	8/3/2010	1137	X	X	X				INVE	
				SB-74 (9-10)	9-10	8/3/2010	1139	X		X			Hold	INVE	
				SB-74 (14-15)	14-15	8/3/2010	1142	X		X			Hold	INVE	
				SB-74 (19-20)	19-20	8/3/2010	1144	X		X			Hold	INVE	
				SB-74 (24-25)	24-25	8/3/2010	1146	X		X			Hold	INVE	
				SB-74 (29-30)	29-30	8/3/2010	1152	X		X			Hold	INVE	Refusal at 30 feet bgs in basalt
QC Laboratory Leach Field	SB-75	823774.96	389968.12	SB-75 (0-1)	0-1	8/3/2010	1500	X	X	X				INVE	
				SB-75 (1-2)	1-2	8/3/2010	1502	X	X	X	X			INVE	
				SB-75 (4-5)	4-5	8/3/2010	1504	X	X	X				INVE	
				SB-175 (4-5)	4-5	8/3/2010	1445	X	X	X				DUP	
				SB-75 (9-10)	9-10	8/3/2010	1510	X		X			Hold	INVE	
				SB-75 (14-15)	14-15	8/3/2010	1515	X		X			Hold	INVE	
				SB-75 (19-20)	19-20	8/3/2010	1517	X		X			Hold	INVE	Refusal at 20 feet bgs in basalt
SB-76	823753.31	389954.43		SB-76 (0-1)	0-1	8/3/2010	1416	X	X	X				INVE	
				SB-76 (1-2)	1-2	8/3/2010	1418	X	X	X	X			INVE	
				SB-76 (4-5)	4-5	8/3/2010	1420	X	X	X				INVE	
				SB-76 (9-10)	9-10	8/3/2010	1424	X		X			Hold	INVE	
				SB-76 (14-15)	14-15	8/3/2010	1426	X		X			Hold	INVE	
				SB-76 (19-20)	19-20	8/3/2010	1428	X		X			Hold	INVE	
				SB-76 (21.5-22.5)	21.5-22.5	8/3/2010	1430	X	X	X			Hold	INVE	Refusal at 22.5 feet bgs in weathered basalt
SB-77	823778.32	389922.05		SB-77 (0-1)	0-1	8/3/2010	1329	X	X	X				INVE	
				SB-77 (1-2)	1-2	8/3/2010	1330	X	X	X	X			INVE	
				SB-77 (4-5)	4-5	8/3/2010	1332	X	X	X				INVE	
				SB-77 (9-10)	9-10	8/3/2010	1336	X		X			Hold	INVE	
				SB-77 (14-15)	14-15	8/3/2010	1338	X		X			Hold	INVE	
				SB-77 (19-20)	19-20	8/3/2010	1345	X		X			Hold	INVE	
				SB-77 (24-25)	24-25	8/3/2010	1347	X		X			Hold	INVE	Refusal at 25 feet bgs in basalt

Table D-1
Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations				Sample Information						General Chemistry ^(d)		Chemical Parameters Rad Chem ^(e)		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	Chemistry ^(d)	Gross a & B	Ra-226/228						
Gypstack Area Decant ditch	SB-78	820804.97	393922.18	SB-78 (0-1)	0-1	8/11/2010	950	X	X	X						INVE	
				SB-78 (0-1)	0-1	8/11/2010	900	X	X	X						DUP	
				SB-78 (1-2)	1-2	8/11/2010	951	X	X	X	X		X			INVE	
				SB-78 (4-5)	4-5	8/11/2010	953	X	X	X			X			INVE	
				SB-78 (9-10)	9-10	8/11/2010	955			X					Hold	INVE	
				SB-78 (14-15)	14-15	8/11/2010	958			X					Hold	INVE	
				SB-78 (19-20)	19-20	8/11/2010	1005			X					Hold	INVE	Refusal at 20 feet bgs in basalt
	SB-79	820806.68	392908.01	SB-79 (0-1)	0-1	8/11/2010	1031	X	X	X						INVE	
				SB-79 (1-2)	1-2	8/11/2010	1032	X	X	X	X					INVE	
				SB-79 (4-5)	4-5	8/11/2010	1034	X	X	X						INVE	
				SB-79 (9-10)	9-10	8/11/2010	1038			X					Hold	INVE	
				SB-79 (14-15)	14-15	8/11/2010	1041			X					Hold	INVE	
				SB-79 (16-17)	16-17	8/11/2010	1051			X					Hold	INVE	Refusal at 17 feet bgs in basalt
	SB-80	820812.97	392149.01	SB-80 (0-1)	0-1	8/11/2010	1102	X	X	X						INVE	
				SB-80 (1-2)	1-2	8/11/2010	1105	X	X	X	X					INVE	
				SB-80 (4-5)	4-5	8/11/2010	1107	X	X	X						INVE	
				SB-80 (9-10)	9-10	8/11/2010	1110	X		X					Hold	INVE	
				SB-80 (13-14)	13-14	8/11/2010	1115	X		X					Hold	INVE	Refusal at 14.5 feet bgs in Tufa
	SB-81	820818.39	390900.38	SB-81 (0-1)	0-1	8/11/2010	1138	X	X	X						INVE	
				SB-81 (1-2)	1-2	8/11/2010	1139	X	X	X	X					INVE	
				SB-81 (4-5)	4-5	8/11/2010	1141	X	X	X						INVE	
				SB-81 (9-10)	9-10	8/11/2010	1145	X		X					Hold	INVE	
				SB-81 (14-15)	14-15	8/11/2010	1150	X		X					Hold	INVE	
				SB-81 (19-20)	19-20	8/11/2010	1155	X		X					Hold	INVE	
				SB-81 (22-23)	22-23	8/11/2010	1200	X		X					Hold	INVE	Refusal at 23 feet bgs in basalt
East Gypstack Area	SB-82	823203.19	394658.49	SB-82 (0-1)	0-1	8/11/2010	1340	X	X	X						INVE	
				SB-82 (1-2)	1-2	8/11/2010	1341	X	X	X	X					INVE	
				SB-182 (1-2)	1-2	8/11/2010	1310	X	X	X						DUP	
				SB-82 (4-5)	4-5	8/11/2010	1343	X	X	X						INVE	
				SB-82 (9-10)	9-10	8/11/2010	1345	X		X					Hold	INVE	
				SB-82 (14-15)	14-15	8/11/2010	1350	X		X					Hold	INVE	
				SB-82 (19-20)	19-20	8/11/2010	1355	X		X					Hold	INVE	Refusal at 21 feet bgs in basalt
	SB-83	823194.87	393362.79	SB-83 (0-1)	0-1	8/11/2010	1429	X	X	X						INVE	
				SB-83 (1-2)	1-2	8/11/2010	1430	X	X	X	X					INVE	
				SB-83 (4-5)	4-5	8/11/2010	1432	X	X	X						INVE	
				SB-83 (5-6)	5-6	8/11/2010	1435								Hold	INVE	Wet from 6 to 9.5 feet bgs, Refusal at 10 feet bgs in tufa
	SB-84	822367.63	390463.51	SB-84 (0-1)	0-1	8/11/2010	1505	X	X	X						INVE	
				SB-84 (1-2)	1-2	8/11/2010	1507	X	X	X	X					INVE	
				SB-84 (4-5)	4-5	8/11/2010	1510	X	X	X						INVE	
				SB-84 (9-10}	9-10	8/11/2010	1515	X		X					Hold	INVE	Refusal at 10 feet bgs in basalt

Table D-1

Soil Sample Summary - 2010
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and Soil Boring Locations				Sample Information						Chemical Parameters		GRO & BTEX ^(f)	Analysis on Hold ^(b)	Sample Type (INVE/DUP)	Additional Comments		
Soil Boring	Easting	Northing	Sample ID	Depths	Date	Time	Metals ^(c)	pH	General Chemistry ^(d)	Rad Chem ^(e) Gross a & B	Ra-226/228						
Cooling Pond Area																	
SB-85	821855.03	389809.78	SB-85 (0-1)	0-1	8/11/2010	1540	X	X	X						INVE		
			SB-85 (1-2)	1-2	8/11/2010	1542	X	X	X			X			INVE		
			SB-85 (4-5)	4-5	8/11/2010	1544	X	X	X						INVE		
			SB-85 (8-9)	8-9	8/11/2010	1547	X		X					Hold	INVE	Refusal at 9 feet bgs in tufa	
SB-86	820700.00	388900.00	SB-186 (0-1)	0-1	8/12/2010	730	X	X	X						DUP		
			SB-186 (1-2)	1-2	8/12/2010	732	X	X	X			X	X			DUP	
			SB-186 (4-5)	4-5	8/12/2010	735	X	X	X							DUP	
			SB-86 (0-1)	0-1	8/12/2010	815	X	X	X							INVE	
			SB-86 (1-2)	1-2	8/12/2010	817	X	X	X			X	X			INVE	
			SB-86 (4-5)	4-5	8/12/2010	819	X	X	X							INVE	
			SB-86 (9-10)	9-10	8/12/2010	825	X		X						Hold	INVE	
			SB-86 (14-15)	14-15	8/12/2010	830	X		X						Hold	INVE	
			SB-86 (18-19)	18-19	8/12/2010	840	X		X						Hold	INVE	Refusal at 19 feet bgs in weathered basalt
SB-87	820985.27	388229.81	SB-87 (0-1)	0-1	8/12/2010	930	X	X	X						INVE		
			SB-87 (1-2)	1-2	8/12/2010	931	X	X	X			X				INVE	
			SB-87 (4-5)	4-5	8/12/2010	932	X	X	X						Hold	INVE	
			SB-87 (9-10)	9-10	8/12/2010	933	X		X						Hold	INVE	
			SB-87 (12-13)	10-11	8/12/2010	934	X		X						Hold	INVE	Refusal at 11 feet bgs in weathered basalt
Additional QC Samples																	
Trip Blanks																	
	-	-	TB080410	-	8/4/2010	-							X		INVE		
	-	-	TB080510	-	8/5/2010	-							X		INVE		
	-	-	TB080510	-	8/6/2010	-							X		INVE		
Equipment Blanks																	
	-	-	EB080410	-	8/4/2010	1030	X	X	X	X		X	X		INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB080510	-	8/5/2010	915	X	X	X	X			X		INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB080610	-	8/6/2010	1100	X	X	X	X			X		INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB080910	-	8/9/2010	1615	X	X	X	X					INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081010	-	8/10/2010	1050	X	X	X	X		X			INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081110	-	8/11/2010	1300	X	X	X	X			X		INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081210	-	8/12/2010	1045	X	X	X	X			X		INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081310	-	8/13/2010	935	X	X	X	X					INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081610	-	8/16/2010	1750	X	X	X	X					INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081710	-	8/17/2010	1115	X	X	X	X					INVE	Collected from deconned Geoprobe cutting shoe	
	-	-	EB081810	-	8/18/2010	1205	X	X	X	X					INVE	Collected from deconned Geoprobe cutting shoe	

a/ Oxidation Tank Farm includes Tank #11, Tank #11A, Tank #25, Tank #25A, Tank #38, Tank #41, and Tank #50. Central Tank Farm includes Tank #12, Tank #13, Tank #18, Tank #20, Tank #21, Tank #23, Tank #24, Tank #24A, and Tank #47.

b/ Samples were collected from 0-1 ft bgs; 1-2 ft bgs, and 4-5 ft bgs; followed by every 5 feet until saturation or refusal at bedrock. In general, samples deeper than 5 feet were submitted to the laboratory on hold pending the initial analysis. Deeper samples were subsequently analyzed for analytes requiring vertical delineation. Borings adjacent to sumps, lagoons, or ponds had deeper samples submitted initially.

c/ Metals include list presented in Table 2.

d/ General chemistry parameters include total phosphorus, nitrate, Total Kjeldahl Nitrogen, ammonia, and fluoride.

e/ Radiological analysis includes gross alpha and gross beta radiation for samples from 0-1 ft bgs. 25% of these samples were analyzed for radium-226 and radium-228.

f/ BTEX = Benzene, toluene, ethylbenzene, and xylenes.

Bold = Above criteria

Table D-2

Analyte Test Methods and Regulatory Criteria
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Analytes	Test Method ^(b)	Method Detection Limit	Laboratory Reporting Limit	EPA	Idaho Department	EPA Region 9 RSL	Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	Comparative Basis	Sample Criteria ^(e)				
				Soil RSLs ^(c)	of Environmental Quality ^(d)					Protection of Groundwater ^(e)	Container	Quantity	Preservative	Holding
				Industrial Soil	Risk Based IDTLs	Critical Pathway				Risk-Based/MCL-Based		(grams)		Time
Metals (mg/kg)														
Aluminum	SW-846 6010C	1.2	10	99,000	- (g)	NS	23,000/NS	15,041	23,000	GW RSL	G	100	none	180 days
Antimony	SW-846 6010C	0.1	1	41	4.8	GWP	0.27/0.27	0.50	0.50	background	G	100	none	180 days
Arsenic	SW-846 6010C	0.1	0.5	1.6	0.39	Surficial Soil	0.0013/0.29	4.7	4.7	background	G	100	none	180 days
Barium	SW-846 6010C	0.5	10	19,000	896	GWP	1,200/82	170.2	170.2	background	G	100	none	180 days
Beryllium	SW-846 6010C	0.05	0.25	200	1.6	GWP	13/3.2	0.89	1.63	IDTL	G	100	none	180 days
Cadmium	SW-846 6010C	0.05	0.2	80	1.4	GWP	NS/NS	0.869	1.4	IDTL	G	100	none	180 days
Calcium	SW-846 6010C	5	250	(j)	NS	NS	NS/NS	38,270 (l)	38,270	background	G	100	none	180 days
Chromium, Total	SW-846 6010C	0.05	0.5	15,0000	2,135	GWP	NS/180,000	18.61	2,135	IDTL	G	100	none	180 days
Iron	SW-846 6010C	1.7	15	72,000	5.76	GWP	270/NS	14,811	14,811	background	G	100	none	180 days
Lead	SW-846 6010C	0.05	1	80	50	GWP	NS/14	13.59	14	GW RSL	G	100	none	180 days
Magnesium	SW-846 6010C	5	250	(j)	NS	NS	NS/NS	7,146	7,146	background	G	100	none	180 days
Manganese	SW-846 6010C	0.05	0.75	2,300	223	G	NS/NS	742 (l)	742	background	G	100	none	180 days
Nickel	SW-846 6010C	0.05	2	2,000	59	GWP	20/NS	15.71	20	GW RSL	G	100	none	180 days
Potassium	SW-846 6010C	25	500	(j)	NS	NS	NS/NS	3,393 (l)	3,393	background	G	100	none	180 days
Selenium	SW-846 6010C	0.2	1	510	2.0	GWP	0.4/0.26	1.04	1.04	background	G	100	none	180 days
Sodium	SW-846 6010C	55	500	(j)	NS	NS	NS/NS	289 (l)	289	background	G	100	none	180 days
Thallium	SW-846 6010C	0.13	0.5	1	1.6	GWP	0.0011/0.14	NS	0.5	RL (k)	G	100	none	180 days
Vanadium	SW-846 6010C	0.05	2.5	520	NS	NS	78/NS	22.68	78	GW RSL	G	100	none	180 days
General Chemistry (mg/kg)														
Fluoride	EPA 9056A	1	0.5	4,100	7.4	GWP	NS	3.95	7	IDTL	G	100	4°C	28 days
pH (S.U.)	SW-846 9045	0.01	0.01	NS	NS	NS	NS	NS	NS	NS	G	100	4°C	ASAP
Total Phosphorous	EPA 365.3	6.7	3.35	NS	NS	NS	NS	NS	NS	NS	G	100	4°C	28 days
Total Kjeldahl Nitrogen	EPA 351.2	11	4.2	NS	NS	NS	NS	NS	NS	NS	G	100	4°C	28 days
Nitrate	EPA 9056A	1	0.5	1,600,000	18.4	GWP	NS	NS	NS	NS	G	100	4°C	48 hours
Ammonia	EPA 350.1	1.2	0.6	NS	4.1	Subsurface Soil	NS	NS	NS	NS	G	100	4°C	28 days
Radiological Parameters (pCi/g) ^(c)														
Gross alpha	EPA 900	3 (m)	NS	NS	NS	NS	NS	6.21	NS	NS	G or Poly	30	4°C	28 days
Gross beta	EPA 900	4 (m)	NS	NS	NS	NS	NS	5.52	NS	NS	G or Poly	30	4°C	28 days
Radium-226 - surface	EPA 901/EPA 903.1	1 (m)	NS	5	NS	NS	NS	1.958	1.958	background	G or Poly	250	4°C	28 days
Radium-226 - subsurface	EPA 901/EPA 903.1	1 (m)	NS	15	NS	NS	NS	1.958	1.958	background	G or Poly	250	4°C	28 days
Radium-228	EPA 901/EPA 904.0	1 (m)	NS	15	NS	NS	NS	1.756	1.756	background	G or Poly	250	4°C	28 days

Table D-2

Analyte Test Methods and Regulatory Criteria
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

- a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution
- b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised
HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.
ASTM source: American Society for Testing and Materials.
Methods for sample preparation include SW-846 3050B for metals.
ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.
- c/ Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>
US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>
- d/ Idaho Risk Reduction Manual, July 2004.
- e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>
- f/ Background as per EPA coresponance dated April 19, 2012, except where noted)
- g/ Comparative values are defined as:
- the lower of the human health screening levels, unless this value is below background
 - if the human health screening level is above background, then it is the CV
 - if the human health screening level is below background, then background is the CV
- h/ Provided by Accutest Laboratories.
- i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
- j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.
- k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.
- l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.
- m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects

Table D-3

Soil Sampling Analytical Results - 2010 Ore Processing Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-01 INVE 08/13/10 0-1	SB-01 INVE 08/13/10 1-2	SB-01 INVE 08/13/10 4-5	SB-02 INVE 08/12/10 0-1	SB-02 INVE 08/12/10 1-2	SB-02 DUP 08/12/10 1-2	SB-02 INVE 08/12/10 4-5	SB-02 INVE 08/12/10 9-10	SB-02 INVE 08/12/10 11.5-12.5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway											
<u>Metals (mg/kg)</u>															
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1.4 U	3 U	1.9 U	3.2 U	2 U	-	4.4 U	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	5.3 J	6 J	1.9 U	5.5 J	5.8 J	-	9.8 J	4.7	1.7
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	121 J	132 J	98.7 J	174 J	172 J	-	71.1 J	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.76 J	1.5 U	0.95 U	1.6 U	1 U	-	2.2 U	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	16.3	42.3	1.5 J	43.6	10.3	-	132	0.33 J	0.93 J
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	64,300	110,000	12,500	119,000	37,400	-	263,000	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	87.7	226	42.9	190	79.4	-	642	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	9.7	10.7	11	8.3	15.2	-	13.4	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	7,260	4,900 J	4,010 J	7,040 J	5,500	-	1,670 J	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	35.1	57.2	26.4	46.2	29.1	-	116	23.2	14.7
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,610 J	3,180 J	2,690 J	2,650 J	3,670 J	-	2,500 J	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2.9 U	6 U	3.8 U	6.3 U	4.1 U	-	8.7 U	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	540 U	1,100 U	710 U	1,740 J	770 U	-	5,210 J	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.25 J	0.86	0.095 U	0.32 J	0.1 U	-	3.3	0.13 U	0.13 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	156	402	32.9 J	370	130	-	1,370	28	21.6
<u>Wet Chemistry (mg/kg)</u>															
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	8	7.1	0.99 J	2.6	0.6 U	-	8.2	3.9	1.7
Fluoride	4,100	NS	7.4	GWP	3.95	7	19.4	12.9	0.58 U	20.8	403	-	1.6	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	22.8	6	6.7	6.2	4.7	-	2.5	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	780	994	700	771	911	-	922	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	519	2,810	1,000	2,560	7,060	-	8,410	-	-
pH	NS	NS	NS	NS	NS	NS	7.2	7.28	6.68	7.43	7.5	-	7.73	-	-
<u>Radiological (pCi/g)</u>															
Gross alpha	NS	NS	NS	NS	NS	NS	-	27.4	-	-	17.1	22.4	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	20.7	-	-	13.4	17.8	-	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	6.3	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	0.85	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-3

Soil Sampling Analytical Results - 2010 Ore Processing Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-03	SB-03	SB-03	SB-03	SB-03	SB-04	SB-04	SB-04	SB-04
	Industrial	Risk-Based/MCL-Based	Risk Based	Critical			INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	DUP
	Soil (mg/kg)	IDTLs (mg/kg)	IDTLs (mg/kg)	Pathway			08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10
							0-1	1-2	4-5	9-10	12-13	0-1	1-2	4-5	4-5
Metals (mg/kg)															
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1 U	0.89 U	0.9 U	-	-	3 U	3.3 U	0.96 U	1.1 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	6.3	5.8	2.7 J	3	12.5	6.4 J	12.9 J	2.6 J	2.9
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	46 J	54.6 J	130	-	-	143 J	99 J	142	143
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.51 U	0.48 J	0.73 J	-	-	1.5 U	1.6 U	0.63 J	0.71
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	5.6	4.6	1.9	0.17 U	0.73	19.2	77.6	1.5 J	2.3
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	175,000	23,000	25,400	-	-	95,700	198,000	61,000	35,200
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	48.3	115	27.4	-	-	104	464	20.6	26.3
Lead	80	NS/14	50	GWP	NS/14	13.59	3.2	4.7	9.8	-	-	6.9	128	7.9	9.5
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,130	2,990	5,910	-	-	8,790	3,790 J	8,540	5,590
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	18.7	41.4	30.3	-	-	30.4	101	17.4	22.2
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	935 J	1,490 J	2,950 J	-	-	2,840 J	3,940 J	2,210 J	2,830
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2 U	4.8	1.8 U	-	-	6 U	9 J	1.9 U	2.2 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	380 U	330 U	351 J	-	-	1,570 J	2,220 J	360 U	410 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.1 U	0.23 J	0.099 J	-	-	0.074 U	1.7	0.096 U	0.11 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	51.6	51.3	49.7	-	-	165	777	25	29.6
Wet Chemistry (mg/kg)															
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	5.8	15.4	54.7	2.5	3	11.6	8.6	18.3	46.2
Fluoride	4,100	NS	7.4	GWP	3.95	7	31.5	41.3	21.3	1.1 J	0.62 U	87.7	21.4	2.7	4.8
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	2.5	2.4	4.4	-	-	404	965	18.9	17.4
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	171	711	1,190	-	-	7.76	7.65	650	1,030
Total Phosphorus	NS	NS	NS	NS	NS	NS	859	519	883					1,280	5,160
pH	NS	NS	NS	NS	NS	NS	8	7.82	7.36	-	-	-	-	7.65	7.63
Radiological (pCi/g)															
Gross alpha	NS	NS	NS	NS	NS	NS	-	88	-	-	-	-	88	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	63	-	-	-	-	54.1	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-3

Soil Sampling Analytical Results - 2010 Ore Processing Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Industrial Soil (mg/kg)	Protection of Groundwater ^(e) Risk-Based/MCL-Based	Idaho Department of Environmental Quality ^(b) Risk Based IDTLs (mg/kg)	Critical Pathway	Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-04 INVE 08/12/10 9-10	SB-04 INVE 08/12/10 12-13
<u>Metals (mg/kg)</u>								
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.1	2.9
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.32 J	0.9
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	-
<u>Wet Chemistry (mg/kg)</u>								
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	1.5	1.7
Fluoride	4,100	NS	7.4	GWP	3.95	7	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	5	4.5
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	-
pH	NS	NS	NS	NS	NS	NS	-	-
<u>Radiological (pCi/g)</u>								
Gross alpha	NS	NS	NS	NS	NS	NS	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Industrial Soil (mg/kg)	Protection of Groundwater ^(e) Risk-Based/MCL-Based	Idaho Department of Environmental Quality ^(b) Risk Based Critical Pathway IDTLs (mg/kg)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-05 INVE 08/06/10 0-1	SB-05 INVE 08/06/10 1-2	SB-05 INVE 08/06/10 4-5	SB-05 INVE 08/06/10 9-10	SB-05 INVE 08/06/10 14-15	SB-05 INVE 08/06/10 19-20	SB-05 INVE 08/06/10 21-22	SB-06 INVE 08/06/10 0-1	SB-06 INVE 08/06/10 1-2	SB-06 INVE 08/06/10 4-5
<u>Volatile Organic Compounds (mg/l)</u>																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	0.0012 U	0.00094 U	0.00093 U	-	-	-	-	0.0014 U	0.0011 U	0.0013 U
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	0.0013 U	0.001 U	0.001 U	-	-	-	-	0.0015 U	0.0013 U	0.0014 U
Toluene	45,000	0.69	4.89	GWP	NS	NS	0.0014 U	0.0011 U	0.0011 U	-	-	-	-	0.0017 U	0.0014 U	0.0015 U
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	3.1 U	2.8 U	2.6 U	-	-	-	-	3.9 U	3.4 U	3.8 U
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	0.0025 U	0.0021 U	0.002 U	-	-	-	-	0.003 U	0.0025 U	0.0028 U
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.48 U	0.44 U	0.43 U	-	-	-	-	0.54 U	2 U	0.11 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3	4.8	4.8	4.7	3.2 J	4.6	10.8	3.6	7.7 J	1.9
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	71 J	118	115	-	-	-	-	108 J	146 J	195
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.48 U	0.74 J	0.71 J	-	-	-	-	0.54 U	1 J	0.56 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	3.6	3.8	4.6	3.9	3.6	0.73 J	1.1 J	9.4	48.2	21.3
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	40,100	45,000	40,100	-	-	-	-	86,900	115,000	2,200 J
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	29	45.2	30.9	-	-	-	-	94.4	282	132
Lead	80	NS/14	50	GWP	NS/14	13.59	5.5	9.5	9	-	-	-	-	11.9	14.9	15.1
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	8,960	6,950	7,680	-	-	-	-	2,320 J	2,100 J	156 J
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	16.9	30	28.3	-	-	-	-	17.3	29.9	1 J
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,450 J	2,430 J	2,400 J	-	-	-	-	1,940 J	4,420 J	4,540
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.9 U	4 J	2.4 J	-	-	-	-	2.2 U	4.1 J	0.59 J
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	360 U	330 U	461 J	-	-	-	-	400 U	1,180 J	420 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.096 U	0.88 U	0.87 U	-	-	-	-	0.11 U	0.77 J	0.79
Vanadium	520	78/NS	NS	NS	78/NS	22.68	44.7	56.1	43.1	-	-	-	-	109	416	163
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	35.4	19.1	27.1	73.4	9.6	17.1	11.2	104	148	450
Fluoride	4,100	NS	7.4	GWP	3.95	7	18	11	6	-	-	-	-	14.2	38.9	4.8
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	3.8	4.9	2.4	-	-	-	-	2.4	0.57 U	0.62 U
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	812	448	280	-	-	-	-	753	947	1,870
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,180	2,740	4,670	-	-	-	-	3,230	7,260	2,880
pH	NS	NS	NS	NS	NS	NS	7.84	7.75	7.83	-	-	-	-	6.94	6.55	3.49
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	10.4	-	-	-	-	-	-	53	-
Gross beta	NS	NS	NS	NS	NS	NS	-	7.3	-	-	-	-	-	-	35.5	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-06 INVE 08/06/10 9-10	SB-06 INVE 08/06/10 14-15	SB-06 INVE 08/06/10 18-19	SB-07 INVE 08/06/10 0-1	SB-07 DUP 08/06/10 0-1	SB-07 INVE 08/06/10 1-2	SB-07 INVE 08/06/10 4-5	SB-07 INVE 08/06/10 9-10	SB-07 INVE 08/06/10 14-15	SB-07 INVE 08/06/10 18-19
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Volatile Organic Compounds (mg/l)</u>																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	-	-	-	0.0014 U	0.0011 U	0.0013 U	0.001 U	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	-	-	-	0.0015 U	0.0012 U	0.0014 U	0.0011 U	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	-	-	-	0.0016 U	0.0013 U	0.0015 U	0.0012 U	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	-	-	-	3.5 U	3.6 U	4 U	2.9 U	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	-	-	-	0.003 U	0.0024 U	0.0028 U	0.0022 U	-	-	-
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	-	-	1.6 U	0.44 U	0.9 U	0.44 U	-	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.2	3.3 J	4.1	5	4.2	3.1 J	3.5	2.5	2.9	4.3
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	-	-	130	128	130 J	105	-	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	-	-	0.38 J	0.65	0.9 U	0.68 J	-	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.46	1.8	0.56	2.5	4.3	10.7	1.3	-	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	-	-	103,000	19,000	76,000	18,600	-	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	-	-	340	51.9	139	22.6	-	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	6.9	12.7	10.4	8.9	11.3	40.3	10.5	-	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	-	-	8,220	4,170	2,150 J	5,140	-	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	-	-	26.4	25.9	9.4	21.2	-	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	-	-	1,340 J	2,800	2,230 J	2,960 J	-	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	-	-	1.8 J	1	1.8 U	0.88 J	-	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	-	-	1,100 J	330 U	680 U	330 U	-	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.1 U	0.079 U	0.12 U	0.31 U	0.088 U	0.14 J	0.87 U	-	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	-	-	72.7	51.1	133	25.5	-	-	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	17.5	8.1	10.7	38.2	44.8	294	119	6.7	6	28.1
Fluoride	4,100	NS	7.4	GWP	3.95	7	-	-	-	14.1	17.6	11.8	15.2	1.5	5.7	11.2
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	-	-	-	12.2	3.3	0.6 U	0.59 U	-	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	-	-	295	518	673	1,070	-	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	-	-	2,430	5,370	6,470	995	-	-	-
pH	NS	NS	NS	NS	NS	NS	-	-	-	6.97	7.00	4.94	7.15	-	-	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	36	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	21.3	-	-	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve			Idaho Department		SB-08	SB-08	SB-08	SB-08	SB-08	SB-08	SB-08	SB-08	SB-09	SB-09	SB-09
Sample Type:	Protection of			of Environmental Quality ^(b)		INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE	DUP
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Background	Comparative	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/05/10	08/05/10	08/05/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	Concentrations	Values ^(g)	0-1	1-2	1-2	4-5	9-10	14-15	19-20	0-1	1-2	1-2
Volatile Organic Compounds (mg/l)																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	0.001 U	0.0011 U	-	0.00067 U	-	-	-	0.00094 U	0.0011 U	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	0.0011 U	0.0012 U	-	0.00074 U	-	-	-	0.001 U	0.0012 U	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	0.0012 U	0.0013 U	-	0.00081 U	-	-	-	0.0011 U	0.0013 U	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	2.7 U	2.9 U	-	2.1 U	-	-	-	2.5 U	2.5 U	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	0.0022 U	0.0023 U	-	0.0015 U	-	-	-	0.0021 U	0.0023 U	-
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.74 U	0.44 U	-	0.37 U	-	-	-	1.1 U	0.99 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.6 J	5	-	3.2	3.3 J	6.4	4.3	5.1 J	3.7 J	-
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	74.8	88.9	-	66.9	-	-	-	102 J	75.7 J	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.37 U	0.52 J	-	0.33 J	-	-	-	0.64 J	0.49 U	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	4.3	4.2	-	3.8	6	3.4	1.6	4.6	2.6	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	28,700	46,500	-	59,500	-	-	-	39,400	29,000	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	29.6	33.6	-	29.5	-	-	-	41.5	22.6	-
Lead	80	NS/14	50	GWP	NS/14	13.59	7	8	-	6.9	-	-	-	10.6	5	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	7,140	11,400	-	25,000	-	-	-	11,700	7,640	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	21.3	26.6	-	19.2	-	-	-	30	17.8	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,660 J	1,870 J	-	1,310 J	-	-	-	2,110 J	1,330 J	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.5 U	2 J	-	1.3 J	-	-	-	2.1 U	2 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	280 U	170 U	-	140 U	-	-	-	400 U	370 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.074 U	0.088 U	-	0.074 U	-	-	-	0.11 U	0.099 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	75.7	48.3	-	37.2	-	-	-	53.8	37.4	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	9.4	9.7	-	35.3	39.6	399	771	20	21.4	-
Fluoride	4,100	NS	7.4	GWP	3.95	7	7.8	4.5	-	2.6	-	-	-	6.1	12.5	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	13.9	7.5	-	0.56 U	-	-	-	0.55 U	0.56 U	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	84.7	111	-	357	-	-	-	400	323	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	416	2,160	-	3,280	-	-	-	2,000	2,130	-
pH	NS	NS	NS	NS	NS	NS			-	7.63	-	-	-	8.01	8.06	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	10.5	11.9	-	-	-	-	-	6.7	12.9
Gross beta	NS	NS	NS	NS	NS	NS	-	7.2	7	-	-	-	-	-	5.7	8.1
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	2.75	3.68	-	-	-	-	-	3.14	2.82
Radium 228	15	NS	NS	NS	NS	15	-	1.23	1.04	-	-	-	-	-	1.03	0.75

U = Analyte not detected above method detection limit.

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INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Level			Idaho Department		SB-09	SB-09	SB-09	SB-09	SB-09	SB-10	SB-10	SB-10	SB-10	SB-10	SB-10
Sample Type:	Protection of			of Environmental Quality ^(b)		INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Background	Comparative	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	Concentrations	Values ^(g)	4-5	4-5	9-10	14-15	19-20	0-1	1-2	4-5	9-10	14-15
UTL 95-95 ^(f)																
Volatile Organic Compounds (mg/l)																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	0.00082 U	0.0008 U	-	-	-	-	-	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	0.0009 U	0.00088 U	-	-	-	-	-	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	0.00099 U	0.00096 U	-	-	-	-	-	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	2.5 U	2.6 U	-	-	-	-	-	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	0.0018 U	0.0018 U	-	-	-	-	-	-	-	-
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.97 U	0.91 U	-	-	-	1 U	0.8 U	0.84 U	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.8 J	2.5	5.1	6.1	4.3	3.4 J	4.1	3.4 J	4.4 J	4.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	96.8 J	91.9	-	-	-	57.2 J	152	126	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.83 J	0.74	-	-	-	0.52 U	0.4 U	0.42 U	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	1.4 J	0.99	-	-	-	1.5 J	6.7	6.6	1.4 J	0.85
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	6,630	5,800	-	-	-	254,000	24,300	21,800	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	30.9	29.1	-	-	-	76.5	61.5	79.2	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	11.8	11.4	-	-	-	3.5	13.6	20.9	13.8	10.5
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,970	3,330	-	-	-	5,730	7,530	5,240	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	19.3	16.5	-	-	-	15	37.4	23.6	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,630 J	2,560	-	-	-	710 J	3,080 J	2,390 J	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.9 U	1.8 U	-	-	-	2.1 U	1.6 U	1.7 U	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	360 U	340 U	-	-	-	585 J	1,530 J	1,210 J	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.097 U	0.091 U	-	-	-	2.1 U	0.8 U	0.084 U	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	26.3	25.4	-	-	-	39.3	101	90.5	-	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	59.8	50.6	263	66.9	89.5	33.6	49.5	75	10.9	4.5
Fluoride	4,100	NS	7.4	GWP	3.95	7	11.7	17.7	2.1	1.4	1.4	24.6	23.7	18.9	8.5	3.7
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	9.4	9.6	-	-	-	14.8	4.8	10	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	765	782	-	-	-	223	512	485	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	1,060	801	-	-	-	6,240	2,370	1,500	-	-
pH	NS	NS	NS	NS	NS	NS	6.86	7.06	-	-	-	7.36	7	6.98	-	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	8.3	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	5	-	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical path

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-11 INVE 08/04/10 0-1	SB-11 DUP 08/04/10 0-1	SB-11 INVE 08/04/10 1-2	SB-11 INVE 08/04/10 4-5	SB-11 INVE 08/04/10 9-10	SB-11 INVE 08/04/10 12.5-13.5	SB-12 INVE 08/04/10 0-1	SB-12 INVE 08/04/10 1-2	SB-12 INVE 08/04/10 4-5	SB-12 INVE 08/04/10 9-10
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Volatile Organic Compounds (mg/l)</u>																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	-	-	-	-	-	-	-	-	-	-
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.69 U	0.87 U	0.84 U	0.81 U	-	-	0.43 U	0.42 U	0.44 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	6	3.7	4.7	3.2 J	5.4	2.4 J	7.2	2 J	2.7	3
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	149	197	153	168	-	-	203	220	92.7	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.42 J	0.46	0.45 J	1.4 J	-	-	0.3 J	0.21 U	0.66 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	5.9	5.7	8.6	5.2	11.1	0.92 J	5.4	0.97	0.32 J	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	36,500	41,400	41,700	13,200	-	-	30,100	14,300	5,300	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	61.4	67.7	102	248	-	-	115	27.3	25.5	-
Lead	80	NS/14	50	GWP	NS/14	13.59	27.5	19.3	35.3	9.9	-	-	66.7	4.7	11.2	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	8,740	12,800	7,270	3,300	-	-	9,450	14,100	3,840	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	24.8	34.7	27	9.4	-	-	91.1	32.1	13.7	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,020 J	2,620	2,320 J	4,930	-	-	2,640	3,350	2,390	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2 J	1.7 U	2.3 J	1.6 U	-	-	2.2 J	1.2 J	0.88 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	2,280 J	3,140	2110 J	871 J	-	-	1,530 J	2,770	170 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.69 U	0.87 U	0.84 U	0.081 U	-	-	0.087 U	0.85 U	0.088 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	103	114	135	424	36.2	29.6	198	213	24.3	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	66.6	75.8	32.1	333	25.2	23.1	49.7	10.7	93.1	9.1
Fluoride	4,100	NS	7.4	GWP	3.95	7	39.7	41	41.7	295	4.3	46.7	15	4.5	2	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	53.4	88	19.6	78.6	43.9	34.1	8.7	2.8	4.3	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	405	387	355	1,280	-	-	576	165	843	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,030	464	6,530	1,620	-	-	6,540	2,090	499	-
pH	NS	NS	NS	NS	NS	NS	5.14	5.09	5.19	4.7	-	-	7.29	7.29	7.32	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	17.7	-	-	-	-	1.04	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	17.7	-	-	-	-	1.96	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical path

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-12 INVE 08/04/10 14-15	SB-13 INVE 08/04/10 0-1	SB-13 INVE 08/04/10 1-2	SB-13 INVE 08/04/10 4-5	SB-13 INVE 08/04/10 9-10	SB-13 INVE 08/04/10 14-15	SB-14 INVE 08/04/10 0-1	SB-14 INVE 08/04/10 1-2	SB-14 INVE 08/04/10 4-5	SB-14 INVE 08/04/10 9-10
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Volatile Organic Compounds (mg/l)</u>																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	-	-	-	-	-	-	-	-	-	-
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	0.91 U	0.37 U	0.082 U	-	-	0.77 U	1 U	0.57 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.6	5.9	3.6	3.2	4.6	2.2	3.3 J	7.9	9.4	4.4
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	110	273	192	-	-	75.5 J	225	197	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	0.45 U	0.19 U	0.041 U	-	-	0.38 U	0.52 U	0.66 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	-	6.6	1.7	0.31	-	-	5.4	4.9	0.42 J	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	89,700	38,200	33,200	-	-	58,900	30,100	10,600	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	76.6	31.3	9.4	-	-	108	86	452	-
Lead	80	NS/14	50	GWP	NS/14	13.59	-	14.8	183	9.8	-	-	5.1 J	66.9	12.4	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	41,700	4,980	204	-	-	26,900	8,570	5,180	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	35.9	10.5	0.57 J	-	-	40	26.6	17.7	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	1,550 J	1,700 J	1,820	-	-	992 J	2,090 J	3,280	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	1.8 U	1 J	0.66 U	-	-	1.5 U	2.1 U	1.1 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	2,400 J	2,410	31 U	-	-	1,680 J	2,790 J	220 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	1.4 J	0.074 U	0.082 U	-	-	0.77 U	0.1 U	0.65	0.32 J
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	83.8	50.6	13.3	-	-	69.3	87.1	115	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	4.2	23.4	21.7	27.4	231	510	23.2	10.4	19.6	588
Fluoride	4,100	NS	7.4	GWP	3.95	7	-	43.2	17.9	6.7	-	-	20.9	19.3	10.8	5.3
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	-	27.3	22.9	17.2	-	-	17.9	5.1	3.7	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	318	283	311	-	-	282	268	607	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	853	4,960	682	-	-	3,390	3,320	2,500	-
pH	NS	NS	NS	NS	NS	NS	-	7.09	4.84	5.57	-	-	7.1	7.81	3.82	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	8.6	-	-	-	-	6.6	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	8.4	-	-	-	-	6.3	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	2.34	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	0.67 U	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Levels			Idaho Department of Environmental Quality ^(b)			SB-14	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-15	SB-16
Sample Type:		Protection of			Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/04/10	08/02/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	14-15	0-1	1-2	4-5	9-10	14-15	19-20	24-25	26-27	0-1
<u>Volatile Organic Compounds (mg/l)</u>																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	-	-	-	-	-	-	-	-	-	-
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	0.82 U	0.98 U	0.97 U	-	-	-	-	-	0.51 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	6.0	4.6	5.8	7.6	4.4	5.1 J	3.2	3.5	3.3	5.3
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	98.6	326	200	-	-	-	-	-	96.6
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	0.41 U	0.49 U	1.3 J	-	-	-	-	-	0.43 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	-	6.1	4	3.9	0.52 J	0.8 U	1.1	1.2	1.2	4.2
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (I)	-	92,100	50,000	41,400	-	-	-	-	-	73,900
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	54.3	452	25.3	-	-	-	-	-	33.7
Lead	80	NS/14	50	GWP	NS/14	13.59	-	4.8 J	21.7	11.7	-	-	-	-	-	6.3
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	36,400	9,730	5,120	-	-	-	-	-	8,390
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	28.8	25.6	39.8	-	-	-	-	-	20.8
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (I)	-	1,930 J	3,240 J	2,530 J	-	-	-	-	-	2,550 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	1.6 U	2 U	1.9 U	-	-	-	-	-	1 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (I)	-	1,070 J	2,570 J	360 U	-	-	-	-	-	264 J
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.24	0.82 U	1.6 J	0.97 U	-	-	-	-	-	1 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	71.9	139	43.7	-	-	-	-	-	41.9
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	184	11.7	15.3	24.1	271	105	12.4	7	2.6	34.9
Fluoride	4,100	NS	7.4	GWP	3.95	7	1.8	20.7	9.8	58.1	4.9	9.4	188	682	546	139
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	-	15.7	10	12.6	-	-	-	-	-	8.5
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	308	209	585	-	-	-	-	-	378
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	2,650	2,720	1,150	-	-	-	-	-	2,160
pH	NS	NS	NS	NS	NS	NS	-	7.55	6.51	7.06	-	-	-	-	-	6.51
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	6.5	-	-	-	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	17.8	-	-	-	-	-	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical path

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-16 INVE 08/02/10	SB-16 INVE 08/02/10	SB-16 INVE 08/02/10	SB-17 INVE 08/02/10	SB-17 INVE 08/02/10	SB-17 INVE 08/02/10	SB-17 INVE 08/02/10	SB-17 INVE 08/02/10	SB-18 INVE 08/02/10	SB-18 DUP 08/02/10
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway			1-2	4-5	8-9	0-1	1-2	4-5	9-10	13-14	0-1	0-1
<u>Volatile Organic Compounds (mg/l)</u>																
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	-	-	-	-	-	-	-	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	-	-	-	-	-	-	-	-	-	-
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	18 U	0.46 U	-	0.44 U	0.072 U	0.087 U	-	-	0.53 U	0.96 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	32.4	3.7	1.8 J	4.1	4.7	3.3	4.7	2.8	2.9	3.5
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	71.5	125	-	107	12.8	9.6	-	-	59	70.2
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.35 J	0.63 J	-	0.7 J	0.075 J	0.074 J	-	-	0.39 J	0.48
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	2.3	1	7.2	2.4	0.24	0.044 U	-	-	2.1	4.3
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	27,700	18,700	-	22,300	4,490	2,750	-	-	67,100	70,900
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	18.5	52.8	-	32.4	5.3	4.6	-	-	24.8	34.3
Lead	80	NS/14	50	GWP	NS/14	13.59	4.6	9.8	-	10.2	1.1	1	-	-	4.8	5.1
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	9,090	5,050	-	4,800	761	624	-	-	11,900	17,500
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	12.4	17.1	-	21.4	4.3	1.9	-	-	16.6	19.9
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,780 J	2,550	-	2,200	234 J	215 J	-	-	1,290 J	1,530
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	23.9	0.92 U	-	0.87 U	0.14 U	0.17 U	-	-	1.1 U	1.9 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	170 U	170 U	-	160 U	27 U	33 U	-	-	200 U	360 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.091 U	0.092 U	-	0.087 U	0.072 U	0.087 U	-	-	0.11 U	0.096 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	25.2	38	-	41.4	8.1	4.1	-	-	32.1	43.7
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	12.6	63.7	220	41.7	9.7	2.5	-	-	3.9	5.6
Fluoride	4,100	NS	7.4	GWP	3.95	7	10.2	23.2	178	9.5	2.4	1.6	-	-	5.2	1.9
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	7.2	4.1	-	9	3.2	1.7	-	-	1.6	1.3
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	199	841	-	651	221	29.4	-	-	193	219
Total Phosphorus	NS	NS	NS	NS	NS	NS	639	269	-	577	1,080	194	-	-	1,210	1,920
pH	NS	NS	NS	NS	NS	NS	6.96	6.65	-	6.98	7.04	7.57			7.45	7.36
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	6	-	-	-	2.99	-	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	4.6	-	-	-	2.4	-	-	-	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-4

Soil Sampling Analytical Results - 2010 Sulfuric Acid and PPA
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Industrial Soil (mg/kg)	Protection of Groundwater ^(e) Risk-Based/MCL-Based	Idaho Department of Environmental Quality ^(b) Risk Based IDTLs (mg/kg)	Critical Pathway	Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-18 INVE 08/02/10 1-2	SB-18 INVE 08/02/10 4-5	SB-18 INVE 08/02/10 8.5-9.5
<u>Volatile Organic Compounds (mg/l)</u>									
Benzene	5.4	0.00021	0.0178	GWP	NS	NS	-	-	-
Ethylbenzene	27	0.0017	10.2	GWP	NS	NS	-	-	-
Toluene	45,000	0.69	4.89	GWP	NS	NS	-	-	-
TPH-GRO (C6-C10)	NS	NS	NS	NS	NS	NS	-	-	-
Xylene, (total)	2,700	0.2	1.67	Subsurface Soil	NS	NS	-	-	-
<u>Metals (mg/kg)</u>									
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.52 U	0.58 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	4.3	4.1	6.7
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	116	129	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.71 J	0.75 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	3.4	0.31 J	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	31,400	8,500	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	38	20.6	-
Lead	80	NS/14	50	GWP	NS/14	13.59	9.8	10.5	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	8,300	5,520	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	22.4	18.5	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,370 J	2,230 J	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.2 J	1.2 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	190 U	220 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.1 U	0.12 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	50.9	28.6	-
<u>Wet Chemistry (mg/kg)</u>									
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	37.6	6.2	-
Fluoride	4,100	NS	7.4	GWP	3.95	7	8.1	0.92	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1.2	7.6	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	585	218	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,390	2,170	-
pH	NS	NS	NS	NS	NS	NS	7.29	7.51	-
<u>Radiological (pCi/g)</u>									
Gross alpha	NS	NS	NS	NS	NS	NS	7.7	-	-
Gross beta	NS	NS	NS	NS	NS	NS	5.7	-	-
Radium 226	5 ^(surface) , 15	NS	NS	NS	NS	5 ^(surface) , 15	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical path

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-19 INVE 08/09/10 0-1	SB-19 INVE 08/09/10 1-2	SB-19 INVE 08/09/10 4-5	SB-19 INVE 08/09/10 9-10	SB-19 INVE 08/09/10 14-15	SB-20 INVE 08/18/10 0-1	SB-20 INVE 08/18/10 1-2	SB-20 INVE 08/18/10 4-5	SB-20 INVE 08/18/10 9-10	SB-20 INVE 08/18/10 13-14
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1.8 U	2 U	0.88 U	-	-	0.82 U	1.9 U	0.46 U	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	4.9 J	3.2 J	5.2	0.85	2.2	4.9	6.6 J	3.4	5	4.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	114 J	85.2 J	199	-	-	147	149 J	141	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.91 U	1 U	0.97 J	-	-	0.82 U	2.4 U	0.69 J	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	10.7	21.6	0.44 U	-	-	14.4	29.4	0.64 J	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	92,500	125,000	31,200	-	-	95,800	164,000	11,000	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	73.1	114	23.1	-	-	63.8	173	18.2	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	9.6	7.7	11.1	-	-	11.6	12.6 J	10	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	11,100	9,900	7,700	-	-	15,000	8,930 J	4,320	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	24	34.3	16.3	-	-	33.3	46.5	14.9	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,460 J	2,100 J	4,020 J	-	-	2,580	3,850 J	3,520 J	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	3.6 U	4 U	1.8 U	-	-	4.2	8.4 J	0.92 U	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,050 J	753 J	330 U	-	-	2,280	1,800 U	430 U	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.091 U	0.1 U	0.088 U	-	-	0.082 U	1.9 U	0.12 U	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	116	182	32.6	-	-	118	259	21.9	-	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	15.5	10.6	5.5	35	5.2	253	22.7	44	4.8	2.5
Fluoride	4,100	NS	7.4	GWP	3.95	7	99.8	26.2	2.3	-	-	28.2	44.9	1.7	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	7.7	8.2	16.2	-	-	19.7	11.2	13.3	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	322	348	283	-	-	1,080	561	1,130	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	6,620	7,900	934	-	-	1,890	3,130	632	-	-
pH	NS	NS	NS	NS	NS	NS	6.99	7.25	7.53	-	-	6.34	6.93	7.53	-	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	28.6	-	-	-	-	38.8	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	25	-	-	-	-	27.9	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	10.6	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	0.59 U	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-19	SB-19	SB-19	SB-19	SB-19	SB-20	SB-20	SB-20	SB-20	SB-20
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	9-10	14-15	0-1	1-2	4-5	9-10	13-14

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-21 INVE 08/09/10 0-1	SB-21 INVE 08/09/10 1-2	SB-21 INVE 08/09/10 4-5	SB-21 DUP 08/09/10 4-5	SB-21 INVE 08/09/10 9-10	SB-21 INVE 08/09/10 14-15	SB-21 INVE 08/09/10 15.5-16.5	SB-22 INVE 08/09/10 0-1	SB-22 INVE 08/09/10 1-2	SB-22 INVE 08/09/10 4-5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	3.2 J	1.9 U	1.1 U	0.54 U	-	-	-	1.6 U	0.94 U	1 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	7.4 J	6.7 J	4.4 J	5.7	4.7	3.4	3.1	4.7 J	10.7	7.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	145 J	113 J	143	180	-	-	-	60.7 J	12.9 J	118
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.94 U	0.96 U	0.74 J	0.73	-	-	-	0.8 U	0.47 U	0.52 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	28.6	41.2	0.57 U	0.44	-	-	-	9.6	15.6	12.8
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	118,000	124,000	18,800	35,000	-	-	-	69,700	153,000	55,500
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	218	205	25.8	19.9	-	-	-	90	66.3	72.1
Lead	80	NS/14	50	GWP	NS/14	13.59	72.4	12.8	10.9	10.1	-	-	-	6.5	2.3	11.5
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	5,300	6,680	5,620	6,890	-	-	-	9,820	85,500	14,700
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	23	56.8	16	15.8	-	-	-	56.9	33.4	53.7
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	5,280 J	3,320 J	3,140 J	2,720	-	-	-	1,420 J	642 J	2,410 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	4.4 J	3.9 J	2.3 U	1.1 U	-	-	-	3.7 J	2.8 J	2.1 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	2,840 J	1,670 J	430 U	200 U	-	-	-	600 U	382 J	390 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.094 U	0.096 U	0.11 U	0.11 U	-	-	-	0.08 U	0.094 U	1.3 J
Vanadium	520	78/NS	NS	NS	78/NS	22.68	238	306	32.2	29.1	-	-	-	69.1	71.8	79.6
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	112	17.2	67.9	59.1	4.5	4	2.4	23.1	3.4	68.1
Fluoride	4,100	NS	7.4	GWP	3.95	7	144	26.3	0.78 J	2.7	-	-	-	20.2	111	20.5
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	5	16.6	19.2	34.8	5.3	7	6.2	9.6	3.7	0.59 U
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	349	318	793	686	-	-	-	804	176	599
Total Phosphorus	NS	NS	NS	NS	NS	NS	13,100	5,980	602	1110	-	-	-	5,000	626	3,010
pH	NS	NS	NS	NS	NS	NS	6.49	6.77	7.44	7.40	-	-	-	4.70	5.09	4.79
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	39.4	-	-	-	-	-	-	13.8	-
Gross beta	NS	NS	NS	NS	NS	NS	-	34.1	-	-	-	-	-	-	9.7	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated &

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-21	SB-21	SB-21	SB-21	SB-21	SB-21	SB-21	SB-22	SB-22	SB-22
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	4-5	9-10	14-15	15.5-16.5	0-1	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA correspondence dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-22 INVE 08/09/10 9-10	SB-22 INVE 08/09/10 14-15	SB-22 INVE 08/09/10 15.5-16.5	SB-23 INVE 08/09/10 0-1	SB-23 INVE 08/09/10 1-2	SB-23 INVE 08/09/10 2.5-3.5	SB-24 INVE 08/09/10 0-1	SB-24 INVE 08/09/10 1-2	SB-24 INVE 08/09/10 4-5	SB-24 INVE 08/09/10 6-7
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	-	-	1.7 U	2 U	0.66 U	1 U	2 U	2.6 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.4	0.89	2.1	7.1 J	6.3 J	1.5 J	2.9 J	3 J	2.6 U	-
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	-	-	189	125 J	97.8	72.9 J	32.8 J	462	203 J
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	-	-	0.86 U	0.98 U	0.33 U	0.52 U	1 U	1.3 U	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	1.5	1.6	4.9	17.5	20.3	1.4	15.5	17.1	5.9	19.4
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	-	-	94,400	144,000	130,000	72,000	27,600	2,690 J	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	-	-	162	138	40.4	51.9	108	550	-
Lead	80	NS/14	50	GWP	NS/14	13.59	-	-	-	66.1	28.6	3.8	6.1	3.4	19.2	10.9
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	-	-	5,810	4,600 J	77.8 J	24,600	11,000	307 J	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	23.7	4.1	22.2	22.1	15.7	1.7 J	35.2	15.8	6	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	-	-	4,960 J	2,890 J	386 J	1,640 J	1,120 J	5,110 J	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	-	-	3.4 U	6.1 J	3.8 J	2.1 U	4 U	5.1 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	-	-	3,220 J	1,350 J	250 U	390 U	750 U	960 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	-	-	0.086 U	0.098 U	0.14 J	0.1 U	0.31 J	3.3	0.64
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	-	-	165	168	27	49.7	173	130	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	3.2	6.3	12	80.2	97.1	59.2	8.8	13.3	175	2.5
Fluoride	4,100	NS	7.4	GWP	3.95	7	3.3	817	161	435	147	388	168	56.9	1,690	245
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	-	-	-	1.8	0.6 U	0.7 U	13.5	4.2	0.7 U	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	-	-	309	385	119	353	82.3	1,520	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	-	-	6,350	2,870	3,680	1,750	1,850	2,680	-
pH	NS	NS	NS	NS	NS	NS	-	-	-	4.82	5.32	2.72	5.04	5.73	2.67	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	62	-	-	8.3	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	36.4	-	-	5.37	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	7.2	-	-
Radium 228	15	NS	NS	NS	NS	NS	15	-	-	-	-	-	-	4.52	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-22	SB-22	SB-22	SB-23	SB-23	SB-23	SB-24	SB-24	SB-24	SB-24
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	9-10	14-15	15.5-16.5	0-1	1-2	2.5-3.5	0-1	1-2	4-5	6-7

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA correspondence dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

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- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Level Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-26 INVE 08/18/10 0-1	SB-26 INVE 08/18/10 1-2	SB-26 INVE 08/18/10 4-5	SB-26 INVE 08/18/10 7-8	SB-27 INVE 08/09/10 0-1	SB-27 DUP 08/09/10 0-1	SB-27 INVE 08/09/10 1-2	SB-27 DUP 08/09/10 1-2	SB-27 INVE 08/09/10 4-5	SB-27 INVE 08/09/10 8-9
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.73 U	2.4 J	7.6	1.7 J	2 U	1.5 U	3.3 U	-	2.5 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	4.7	3.5	6.2	3.7 J	6.8 J	8.7	3.5 J	-	5.5 J	2.0 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	84.6 J	63.6 J	140	315	173 J	164	99.2 J	-	375	204
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.73 U	0.49 J	1.2 J	1.2 U	1 U	0.76 U	1.6 U	-	1.2 U	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	22.1	3.2	2.3	186	35.8	82	20.7	-	3.5 J	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	101,000	1,510 J	1,830 J	3,310 J	107,000	93,500	128,000	-	12,300	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	89	222	555	524	233	173	514	-	260	-
Lead	80	NS/14	50	GWP	NS/14	13.59	6.7 J	3.9	7.2	15.6	52	87.4	3.5 J	-	34	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	40,000	68.1 J	504 J	864 J	5,690	5,240	3,160 J	-	185 J	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	30.7	0.18 J	1.2 J	3.1	33.4 J	33.6	16.3 J	-	4.8	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,640 J	2,030	4,440 J	5,430 J	7,090 J	7,130	8,040 J	-	3,270 J	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.5 U	1.1 J	2 J	2.3 U	6 J	7.7	6.5 U	-	5.8 J	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	894 J	340 U	460 U	870 U	5,490	4,700	2,390 J	-	930 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.73 U	10.9	24	3	3.3 J	1.9	2.8 J	-	1.6	1.4
Vanadium	520	78/NS	NS	NS	78/NS	22.68	130	420	2,410	1,210	279	250	605	-	51 J	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	30.2	430	1,110	313	114	160	104	-	117	-
Fluoride	4,100	NS	7.4	GWP	3.95	7	21.6	12.7	34.8	40.3	136	113	154	-	991	285
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	13.4	30.5	93.4	18.2	17.7	2.6	18.1	-	11.4	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	222	1,810	1,280	1,400	518	438	420	-	1,190	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	10,300	4,060	4,920	14,400	7,300	4,700	7,100	-	9,490	-
pH	NS	NS	NS	NS	NS	NS	6.53	4.78	3.32	3.90	5.88	5.57	6.34	-	3.44	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	19.6	-	-	-	-	85	86	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	7.7	-	-	-	-	68	63	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

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IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
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UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-26	SB-26	SB-26	SB-26	SB-27	SB-27	SB-27	SB-27	SB-27
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	DUP	INVE	DUP	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/18/10	08/18/10	08/18/10	08/18/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	7-8	0-1	0-1	1-2	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

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Methods for sample preparation include SW-846 3050B for metals.

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Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

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i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

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Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-28 INVE 08/05/10 0-1	SB-28 INVE 08/05/10 1-2	SB-28 INVE 08/05/10 3.5-4.5	SB-28 DUP 08/05/10 1-2	SB-29 INVE 08/05/10 0-1	SB-29 INVE 08/05/10 1-2	SB-29 INVE 08/05/10 4-5	SB-29 INVE 08/05/10 8-9	SB-30 INVE 08/05/10 0-1	SB-30 INVE 08/05/10 1-2
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.58 U	1.8 U	2.4 U	-	0.4 U	1.6 U	0.4 U	-	1.7 U	1.6 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.3 J	3.3 J	3.3 J	-	1.5 J	4.3 J	6.8	1.7	4.4 J	4.8 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	298	256	350	-	275	157 J	152	-	140 J	137 J
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.58 U	0.96 J	1.2 U	-	0.4 U	1.3 J	2.4	1.5	0.84 U	0.8 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	7.3	20.1	8.9	-	1.3	48.1	104	168	9.2	12.6
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	72,400	82,700	6,490	-	36,900	99,000	16,000	-	127,000	44,300
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	84.8	183	265	-	3.1 J	188	65.5	-	90.6	97.8
Lead	80	NS/14	50	GWP	NS/14	13.59	8.1	8.5	21.5	-	5.3	38.3	9	-	20.5	13.4
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	11,800	2,000 J	304 J	-	12,200	4,700	2,730	-	28,900	4,680
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	8.7 J	12.3	11.2	-	6.1 J	18.4	26.6	-	17.8 J	19.4
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	5,000 J	8,300 J	3,510 J	-	3,950 J	5,170 J	7,740	-	1,620 J	3,020 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	3.6 U	4.8 U	-	1.4 J	3.6 J	1.6 U	-	3.4 U	3.2 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	5,780 J	2,890 J	900 U	-	3,930 J	3,180 J	1,450 J	-	630 U	600 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.58 U	0.49 J	2	-	0.4 U	0.79 U	0.81 U	-	1.7 U	0.08 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	170	366	79.8	-	97	344	241	177	90.7	137
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	66.9	118	192	-	2.6	172	256	170	34.9	124
Fluoride	4,100	NS	7.4	GWP	3.95	7	493	463	1,220	-	42.8	272	322	43.5	18.5	11.6
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	7.5	14.1	0.69 U	-	2.4	7.7	1.2	-	9.8	6.8
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	276	624	1,380	-	63.8	321	1,330	-	324	486
Total Phosphorus	NS	NS	NS	NS	NS	NS	3,040	3,080	1,020	-	2,170	6,550	4,680	-	1,090	2,130
pH	NS	NS	NS	NS	NS	NS	5.12	6.46	2.86	-	7.11	5.15	4.71	-	6.26	6.13
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	47.7	-	50.4	-	23.4	-	-	-	1.7 U
Gross beta	NS	NS	NS	NS	NS	NS	-	59.5	-	61.1	-	15.6	-	-	-	2.4 U
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	3.47	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	0.62 U	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated &

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-28	SB-28	SB-28	SB-28	SB-29	SB-29	SB-29	SB-29	SB-30	SB-30
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	3.5-4.5	1-2	0-1	1-2	4-5	8-9	0-1	1-2

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA correspondence dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Level Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-30 INVE 08/05/10 4-5	SB-31 INVE 08/05/10 0-1	SB-31 INVE 08/05/10 1-2	SB-31 DUP 08/05/10 1-2	SB-31 INVE 08/05/10 4-5	SB-31 INVE 08/05/10 9-10	SB-32 INVE 08/05/10 0-1	SB-32 INVE 08/05/10 1-2	SB-32 INVE 08/05/10 4-5	SB-32 INVE 08/05/10 7-8
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	2.2 U	0.081 U	1.1 U	1.1 U	1 J	-	1.7 U	2 U	1.6 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	5.6 J	2.5	4.6 J	4.9	6	4.3	4.7 J	3.2 J	2.3 J	2.3 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	113 J	76.4	234	133	67.8 J	-	135 J	94.1 J	68.8 J	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	1.1 J	0.23 J	0.93 J	0.97	0.4 U	-	0.85 U	1 U	1.1 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	10.9	2.4	32.3	26.8	9.1	24.8	10	40.7	51.2	56.5
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	15,300	182,000	35,200	65,200	102,000	-	180,000	53,700	111,000	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	110	23.2	89.4	108	36.5	-	44	186	228	-
Lead	80	NS/14	50	GWP	NS/14	13.59	9.8	3.4 J	7.7	21.1	65.2	9.4	5.9 J	5.4	23.4	7.2
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,060 J	13,600	9,250	11,900	7,210	-	10,200	4,500 J	7,410	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	11.5	16	23.7	30.6	25.7	-	15.2 J	26.7	23.7 J	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	4,700 J	1,000 J	3,240 J	2,230	1,780 J	-	1,930 J	1,410 J	824 J	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	4.4 U	1.6 U	2.2 U	2.5	1.7 J	-	3.4 U	4 U	3.2 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	830 U	835 J	3,310 J	1,920	599 J	-	1,570 J	750 U	610 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.11 U	0.4 U	0.11 U	0.11 U	0.08 U	-	1.7 U	0.57	1.6 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	202	37.8	257	247	52.7	-	91.1	301	464	570
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	358	19	74.2	71.5	61	95.1	12.4	91	4.1	5,160
Fluoride	4,100	NS	7.4	GWP	3.95	7	84.1	29	4.8	4.9	19.7	303	13.3	12.9	5.3	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	3.2	6.8	10.4	14.6	2.6	-	4	17.4	5.8	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	899	183	123	224	1,170	-	211	325	149	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	1,600	2,740	2,940	6,610	5,610	-	2,790	5,220	10,600	-
pH	NS	NS	NS	NS	NS	NS	4.89	7.21	5.31	5.45	7.41	-	8.03	5.64	6.05	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	25.1	-	-	-	-	56.9	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	15.9	-	-	-	-	36.5	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	3.01	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	1.14	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-30	SB-31	SB-31	SB-31	SB-31	SB-31	SB-32	SB-32	SB-32	SB-32
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	4-5	0-1	1-2	1-2	4-5	9-10	0-1	1-2	4-5	7-8

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA correspondence dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

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- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-32 INVE 08/05/10 14-15	SB-33 INVE 08/18/10 0-1	SB-33 INVE 08/18/10 1-2	SB-33 INVE 08/18/10 3.5-4	SB-34 INVE 08/18/10 0-1	SB-34 INVE 08/18/10 1-2.5	SB-34 INVE 08/18/10 4-5	SB-34 INVE 08/18/10 9-10	SB-34 INVE 08/18/10 14-15	SB-34 INVE 08/18/10 19-20
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	2.4 J	2.4 J	1 J	0.46 U	4.1 U	0.21 J	0.081 U	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	6.9	5.2	9.8	4.9 J	4.6	7.9 J	3.7	3	5.6	5
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	47.4 J	214	149	152	126 J	166	117	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	0.54 U	1.1 J	1.2 J	0.83 J	2.3 J	0.75 J	0.54 J	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	1.5	19.8	6.8	3.4	3.4	38.3	2.1	0.74	4	0.48 J
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	21,300	6,310	1,440 J	113,000	208,000	46,800	91,900	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	181	718	506	26.5	456	16.8	17.5	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	9.9	71.2	58.1	35.4	8.7	1.8 J	9.1	7.3	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	949 J	888 J	611 J	5,970	5,700 J	5,590	8,150	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	5.7	1.9 J	1.3 J	22.7	24.9 J	103	16.4	23.7	17.2
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	2,620 J	7,940	6,490	2,960 J	5,660 J	2,820	1,240 J	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	2 J	3.6 J	2.1 J	0.92 U	8.3 U	0.99 J	0.81 U	0.94 U	1 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	518 J	1,230 J	1,050 J	340 U	1,600 U	180 U	300 U	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	3.5	8.4	13.6	0.092 U	1.7 U	0.12 U	0.081 U	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	38	240	641	366	32.7	673	25.6	28.6	-	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	9.3	495	815	479	46.6	5.4	6.8	12.5	3.3	6.6
Fluoride	4,100	NS	7.4	GWP	3.95	7	-	22.3	43.8	122	6.1	39.5	5.3	1.3	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	-	14.3	3.6	0.68 U	26.4	20.8	59.7	5.8	7.5	7.8
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	1,380	1,410	1,280	1,860	180	403	393	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	3,850	13,600	12,500	421	5,610	19,700	1,270	-	-
pH	NS	NS	NS	NS	NS	NS	-				7.52	7.32	6.62	8.22	-	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	72	-	-	59	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	29.8	-	-	37.7	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	12.9	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	0.42 U	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
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Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-32	SB-33	SB-33	SB-33	SB-34	SB-34	SB-34	SB-34	SB-34	SB-34
Sample Type:	Protection of		<u>of Environmental Quality</u> ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/05/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	14-15	0-1	1-2	3.5-4	0-1	1-2.5	4-5	9-10	14-15	19-20

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

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c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

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i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Industrial Soil (mg/kg)	Protection of Groundwater ^(e) Risk-Based/MCL-Based	Idaho Department of Environmental Quality ^(b) Risk Based IDTLs (mg/kg)	Critical Pathway	Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-34 INVE 08/18/10 24-25
<u>Metals (mg/kg)</u>							
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	1
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (I)	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-
Lead	80	NS/14	50	GWP	NS/14	13.59	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	23.8
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (I)	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	0.48 J
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (I)	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-
<u>Wet Chemistry (mg/kg)</u>							
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	3.1
Fluoride	4,100	NS	7.4	GWP	3.95	7	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	12.2
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-
pH	NS	NS	NS	NS	NS	NS	-
<u>Radiological (pCi/g)</u>							
Gross alpha	NS	NS	NS	NS	NS	NS	-
Gross beta	NS	NS	NS	NS	NS	NS	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-
Radium 228	15	NS	NS	NS	NS	15	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised.

Table D-5

Soil Sampling Analytical Results - 2010 Phosphoric Acid Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-34
Sample Type:		Protection of	<u>of Environmental Quality</u> ^(b)		Background		INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/18/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	<u>(UTL 95-95)</u> ^(f)	<u>Values</u> ^(g)	<u>24-25</u>

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA correspondence dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-35 INVE 08/17/10 0-1	SB-35 INVE 08/17/10 1-2	SB-35 INVE 08/17/10 4-5	SB-35 DUP 08/17/10 4-5	SB-35 INVE 08/17/10 9-10	SB-35 INVE 08/17/10 13-14	SB-36 INVE 08/17/10 0-1	SB-36 INVE 08/17/10 1-2	SB-36 INVE 08/17/10 4-5	SB-37 INVE 08/17/10 0-1
	Industrial Soil (mg/kg)	Risk-Based/MCL-Basec	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1.7 U	0.13 J	0.99 U	1.7 U	-	-	1.6 U	4.1 U	1 U	1.9 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	5.6 J	2.3	6.6	5.1	2.9	3.6	7 J	12.7 J	3.5 J	3 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	210	71.3	162 J	155	-	-	140 J	158 J	683	155 J
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.87 U	0.19 J	0.99 U	1.1	-	-	2 U	2.1 U	1 U	0.94 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	13.4	0.28	15.8	24.5	0.69	2.9	22.2	23.8	2.5	11.8
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	59,700	38,600	83,900	72,100	-	-	66,900	61,700	3,720 J	79,400
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	46.8	7.2	95.6	185	-	-	84.5	127	149	159
Lead	80	NS/14	50	GWP	NS/14	13.59	8.9	3.5	15.5	18.4	9.3	9.1	15.1	44.1	29.9	11.4
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	11,400	3,810	5,900	5,140	-	-	10,300	5,300 J	809 J	3,770 J
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	24.1	7.2	36.1	30.9	-	-	13.6	24.2	16.8	8.7
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	5,030 J	1,190 J	4,520 J	4,900	-	-	8,680 J	5,180 J	1,340 J	4,680 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	3.5 U	0.42 J	2.3 J	3.5 U	-	-	3.2 U	8.3 U	2.2 J	4.3 J
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	2,640 J	110 U	859 J	1850	-	-	3,640 J	3,160 J	760 U	4,500 J
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.087 U	0.076 U	0.16 J	0.18	0.11 U	0.11 U	0.47	0.26 J	2.7	0.94 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	101	12.3	134	234	21.4	23.3	125	166	58.6	147
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	13.5	6.7	35.3	142	138	186	146	147	107	184
Fluoride	4,100	NS	7.4	GWP	3.95	7	154	11.2	32.9	40.5	0.63 U	10.1	338	175	1,050	215
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	3.4	2.1	5	5.2	-	-	37.1	55.5	50.2	28.8
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	265	204	735	671	-	-	318	379	1,860	561
Total Phosphorus	NS	NS	NS	NS	NS	NS	5,190	980	1,210	7,740	-	-	3,320	2,980	6,970	5,270
pH	NS	NS	NS	NS	NS	NS	7.07	8.19	6.4	6.55	-	-	5.52	5.67	2.97	7.2
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	14.9	-	-	-	-	-	19.2	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	9.6	-	-	-	-	-	13.8	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	5.89	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	0.49 U	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised

Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-35	SB-35	SB-35	SB-35	SB-35	SB-35	SB-36	SB-36	SB-36	SB-37
Sample Type:	Protection of		<u>of Environmental Quality</u> ^(b)		Background		INVE	INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Basec	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	4-5	9-10	13-14	0-1	1-2	4-5	0-1

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

SB-37 DUP 08/17/10 0-1	SB-37 INVE 08/17/10 1-2	SB-37 DUP 08/17/10 1-2	SB-37 INVE 08/17/10 4-5	SB-37 DUP 08/17/10 4-5	SB-38 INVE 08/17/10 0-1	SB-38 INVE 08/17/10 1-2	SB-38 INVE 08/17/10 4-5	SB-39 INVE 08/17/10 0-1	SB-39 INVE 08/17/10 1-2	SB-40 INVE 08/10/10 0-1	SB-40 INVE 08/10/10 1-2	SB-40 INVE 08/10/10 4-5	SB-40 DUP 08/10/10 4-5	SB-40 INVE 08/10/10 9-10	SB-40 INVE 08/10/10 11.5-12.5	SB-41 INVE 08/10/10 0-1	SB-41 INVE 08/10/10 1-2	SB-41 INVE 08/10/10 4-5	SB-41 INVE 08/10/10 9-10
2.1 U	3.8 U	4 U	1.2 U	1.9 U	3.8 U	7.2 U	0.45 U	0.88	0.9 U	3.8 J	2.2 U	1.1 U	1 U	-	-	1.4 U	1.1 U	0.58 J	-
4.7	9.1 J	6.2	7.2	10.8	7.7 J	7.2 U	2.4	2.8	1.5 J	17.8	5.1 J	4 J	4	2.9	5.1	7.6	4.4 J	2.1	3.2
179	298 J	178	399	391	123 J	158 J	92.3	31.4	69.2 J	100	159 J	160	160	-	-	78.4 J	53.5 J	41.4	-
2.7 U	1.9 U	2 U	1.3 J	1.8	1.9 U	3.6 U	0.67 J	0.24	0.45 U	0.46 U	1.1 U	0.82 J	0.73	-	-	0.69 U	0.53 U	0.32 J	-
12.8	8.3	8.3	49.6	22.2	12.7	11.7 J	0.58 J	1.4	1.2 J	5.7	24.5	4.9	0.94	1.6	2.4	10.9	7.1	0.55	-
141,000	52,600	192,000	1,890 J	2,580	62,200	191,000	4,700	38,800	22,300	21,500	71,800	18,700	8,540	-	-	73,900	107,000	19,000	-
278	173	119	662	659	257	218	22.4	10.2	29	22.4	159	42.1	22.7	-	-	72	57.3	7.6	-
13.2	14.6	5.9	20.6	22.3	25.8	4.6 J	10.2	10.6	8.7	38.2	21.9	11.8	11.7	-	-	7.6	4.7	6.8	-
2,380	2,770 J	7,910	316 J	214	5,090 J	4,520 J	3,260	2,690	1,710 J	2,050 J	4,860 J	4,950	4,300	-	-	16,400	34,600	2,800	-
3.5	9.1	21.3	6.6	6.3	15.2	47	13	11.6	18	7.4	31.4	25.5	16.9	-	-	35.1	22	6.6	-
4,560	5,750 J	6,610	5,420 J	5,290	5,380 J	5,870 J	3,050 J	648 J	2,010 J	1,260 J	4,300 J	3,840 J	3,650	-	-	1,620 J	1,290 J	378 J	-
4.3 U	11.8 J	8.1	5.5 J	5.4	7.6 U	14 U	1.3 J	0.15 U	1.8 U	1.9 U	4.4 U	2.2 U	2 U	-	-	3 J	3 J	0.34 J	-
6,910	3,120 J	3,220	450 U	700 U	2,020 J	2,700 U	170 U	229 J	1,220 J	685 J	1,410 J	410 U	370 U	-	-	650 J	418 J	329 J	-
2.3	0.95 U	2 U	3.6	5.1	0.95 U	0.72 U	0.89 U	0.74 U	0.9 U	0.14 J	0.11 U	0.11 U	0.1 U	-	-	0.069 U	0.11 U	0.09 U	-
194	229	337	411	322	335	268	21.2	14.2	30.4	37.1	297	68	31.4	-	-	93.4	72.7	8.5	-
181	90	117	689	828	199	187	126	10.3	13.6	26.1	41.2	73.5	79.2	6.5	9.1	13.4	6.3	3.5	-
218	627	235	1,160	1,310	585	52	0.59 U	51.9	38	211	56.1	11.2	3	45.6	612	35.4	13	13.5	7.4
13.4	24	6.4	3.4	6	7	31	30.3	12.3	22.5	9.4	20	41.4	11.4	4.8	3.7	7.9	8.8	11.5	-
569	562	369	2,310	2,420	227	436	1,030	209	268	174	669	2,110	1,800	-	-	241	401	72.2	-
5,890	6,640	5,610	4,900	12,700	6,910	12,800	1,160	1,040	1,020	1,100	2,890	800	1110	-	-	2,050	2,250	918	-
6.96	5.8	6.83	2.28	2.33	5.93	7.04	7.1	6.74	6.06	6.03	5.6	6.6	6.75	-	-	7.45	7.68	7.3	-
-	53.5	40.8	-	-	-	67	-	-	6	-	46	-	-	-	-	-	10.8	-	-
-	44.2	25.8	-	-	-	44.3	-	-	5.4	-	35.8	-	-	-	-	-	8.3	-	-
-	-	-	-	-	-	-	-	-	9.8	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	4.19	-	-	-	-	-	-	-	-	-	-

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Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

SB-37 DUP 08/17/10 0-1	SB-37 INVE 08/17/10 1-2	SB-37 DUP 08/17/10 1-2	SB-37 INVE 08/17/10 4-5	SB-37 DUP 08/17/10 4-5	SB-38 INVE 08/17/10 0-1	SB-38 INVE 08/17/10 1-2	SB-38 INVE 08/17/10 4-5	SB-39 INVE 08/17/10 0-1	SB-39 INVE 08/17/10 1-2	SB-40 INVE 08/10/10 0-1	SB-40 INVE 08/10/10 1-2	SB-40 INVE 08/10/10 4-5	SB-40 DUP 08/10/10 4-5	SB-40 INVE 08/10/10 9-10	SB-40 INVE 08/10/10 11.5-12.5	SB-41 INVE 08/10/10 0-1	SB-41 INVE 08/10/10 1-2	SB-41 INVE 08/10/10 4-5	SB-41 INVE 08/10/10 9-10
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Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

SB-41 INVE 08/10/10 14-15	SB-41 INVE 08/10/10 17.5-18.5	SB-42 INVE 08/16/10 0-1	SB-42 INVE 08/16/10 1-2	SB-42 INVE 08/16/10 4-5	SB-42 INVE 08/16/10 9-10	SB-42 INVE 08/16/10 14-15	SB-42 INVE 08/16/10 19-20	SB-42 INVE 08/16/10 24-25	SB-43 INVE 08/05/10 0-1	SB-43 INVE 08/05/10 1-2	SB-43 INVE 08/05/10 4-5	SB-43 INVE 08/05/10 9-10	SB-43 INVE 08/05/10 14-15	SB-43 INVE 08/05/10 17.5-18.5	SB-44 INVE 08/10/10 0-1	SB-44 INVE 08/10/10 1-2	SB-44 DUP 08/10/10 1-2	SB-44 INVE 08/10/10 4-5	SB-44 INVE 08/10/10 9-10
-	-	1.8 U	3.3 U	2 U	-	-	-	-	1.6 U	1.1 U	3.7 U	-	-	-	0.5 J	2 U	2.3 U	1.7 U	-
7.1	2.6	6.2 J	4.9 J	7.1 J	2.7	4.5	4.6	3.5	5.1 J	6.3	6.3 J	3.7	5.8	3.8	8.1	6.5 J	4.5	4.8 J	4.2
-	-	108 J	118 J	88.1 J	-	-	-	-	129 J	119	158 J	-	-	-	9.9	144 J	149	132 J	-
-	-	0.91 U	1.7 U	1 U	-	-	-	-	0.79 U	0.88 J	1.9 U	-	-	-	0.24	1 U	1.1 U	0.86 U	-
-	-	22.6	19.6	18.8	0.84	0.53 J	0.55 J	0.54	14.2	17.3	25.9	1	1.6 J	1.1	1	8.1	9.9	8.1	13.1
-	-	161,000	192,000	93,700	-	-	-	-	73,200	46,600	185,000	-	-	-	351,000	64,600	49,700	47,000	-
-	-	217	199	136	-	-	-	-	126	61.4	204	-	-	-	10.6	83.2	98.2	110	-
-	-	43.2	8.6	11.6	-	-	-	-	41.1	10.6	10 J	-	-	-	2 J	25.5	13.7	13.9	-
-	-	5,780	3,740 J	3,860 J	-	-	-	-	6,790	7,550	7,470 J	-	-	-	2,600	6,460	6,780	6,740	-
-	-	43.7	34.2	34.9	-	-	-	-	23.8	50.7	46.1 J	-	-	-	8.2	28.7	27.9	28.4	-
-	-	2,110 J	4,260 J	2,470 J	-	-	-	-	2,650 J	2,760 J	5,700 J	-	-	-	289 J	3,250 J	3,370	3,390 J	-
-	-	5 J	6.6 U	4 U	-	-	-	-	3.2 U	2.3 J	7.5 U	-	-	-	3 U	4.1 U	4.5 U	3.4 U	-
-	-	2,610 J	3,080 J	1,350 J	-	-	-	-	3,300 J	663 J	2,430 J	-	-	-	104 J	1,060 J	850 U	715 J	-
-	-	1.8 U	0.83 U	0.1 U	-	-	-	-	0.79 U	1.1 U	3.9 J	-	-	-	0.3 U	0.1 U	0.11 U	0.086 U	-
-	-	282	259	225	10.9	29.8	32.7	39.3	167	89.2	266	26.6	31.4	26.1	10.1	88.6	102	89.9	-
-	-	66.1	77.2	109	314	431	52.2	54.1	123	56.2	15.6	53.9	4,600	2,180	134	110	29.1	215	246
785	301	38.6	8.4	14.3	1.3	1.8	112	31.5	31.3	6.9	27.4	33.2	50.9	8.9	4.5	27.6	35.8	44.5	44.2
-	-	182	51.7	124	13.4	50.1	32	21.8	27	26.7	24.4	17	20.5	16.8	10.5	58.6	157	4.9	-
-	-	543	368	628	-	-	-	-	526	479	392	-	-	-	101	892	1130	877	-
-	-	6,880	6,600	10,800	-	-	-	-	3,230	2,560	813	-	-	-	2,090	2,390	1,220	5,320	-
-	-	7.42	7.57	5.97	-	-	-	-	5.78	6.72	7.91	-	-	-	7.53	7.03	6.8	7.03	-
-	-	-	52.6	-	-	-	-	-	-	22.6	-	-	-	-	-	14.3	-	-	-
-	-	-	36.4	-	-	-	-	-	-	15	-	-	-	-	-	12.9	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

SB-41	SB-41	SB-42	SB-42	SB-42	SB-42	SB-42	SB-42	SB-42	SB-43	SB-43	SB-43	SB-43	SB-43	SB-43	SB-44	SB-44	SB-44	SB-44	SB-44
INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	DUP	INVE	INVE
08/10/10	08/10/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/05/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10
14-15	17.5-18.5	0-1	1-2	4-5	9-10	14-15	19-20	24-25	0-1	1-2	4-5	9-10	14-15	17.5-18.5	0-1	1-2	1-2	4-5	9-10

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Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

SB-44 INVE 08/10/10 14-15	SB-44 INVE 08/10/10 16.5-17.5
-	-
5.2	4.6
-	-
-	-
1.3 J	3
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
119	154
510	825
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-
-	-

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Table D-6

Soil Sampling Analytical Results - 2010 Central and Oxidation Tank Farm Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

SB-44	SB-44
INVE	INVE
08/10/10	08/10/10
14-15	16.5-17.5

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Table D-7

Soil Sampling Analytical Results - 2010 Granulation Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-45 INVE 08/16/10 0-1	SB-45 INVE 08/16/10 1-2	SB-45 INVE 08/16/10 4-5	SB-45 INVE 08/16/10 9-10	SB-45 INVE 08/16/10 14-15	SB-45 INVE 08/16/10 19-20	SB-45 INVE 08/16/10 23-24	SB-46 INVE 08/16/10 0-1	SB-46 INVE 08/16/10 1-2	SB-46 INVE 08/16/10 4-5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.48 U	1.7 U	0.4 U	-	-	-	-	0.47 U	2 U	0.87 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.2	3.9 J	4.9	3.6	6	3.9	3.8	2.2 J	4.3 J	6.4
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	95.5	95 J	165	-	-	-	-	29 J	141 J	150
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.5 J	1.1 J	0.57 J	-	-	-	-	0.26 J	1.7 J	0.74 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	19.9	58.6	0.57 J	-	-	-	-	7.2	42.1	0.52 J
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	99,600	143,000	50,500	-	-	-	-	18,200	50,200	24,300
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	69.8	128	15.3	-	-	-	-	38.7	331	19.9
Lead	80	NS/14	50	GWP	NS/14	13.59	3.8	3.5	8.2	-	-	-	-	2.2	19.7	10.4
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	15,200	4,180 J	6,390	-	-	-	-	1,860	2,590 J	5,120
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	31	50.9	13.5	-	-	-	-	15.5	19.5	14.4
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,650 J	3,290 J	2,250	-	-	-	-	483 J	5,080 J	2,530 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.6 J	3.4 U	1.9 J	0.67 U	0.77 J	0.69 U	0.46 J	1.2 J	4 J	1.9 J
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,090 J	1,600 J	150 U	-	-	-	-	180 U	1,190 J	330 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.97 U	0.86 U	0.81 U	-	-	-	-	0.095 U	0.099 U	0.87 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	152	163	20.9	-	-	-	-	56	497	29.5
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	1,270	4,170	2,900	4,220	3,110	2,370	1,910	1,040	2,100	873
Fluoride	4,100	NS	7.4	GWP	3.95	7	15.9	16.4	4.6	-	-	-	-	22.3	45.5	2
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	369	70.6	12.3	-	-	-	-	108	58.3	14.8
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,550	3,720	4,180	-	-	-	-	1,120	3,850	1,700
Total Phosphorus	NS	NS	NS	NS	NS	NS	8,570	9,450	5,900	-	-	-	-	14,100	10,900	13,900
pH	NS	NS	NS	NS	NS	NS	11.13	7.51	7.88	-	-	-	-	5.93	5.07	7.59
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	53.7	-	-	-	-	-	-	34.3	-
Gross beta	NS	NS	NS	NS	NS	NS	-	39.6	-	-	-	-	-	-	26	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	20.7	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	0.52 U	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised

Table D-7

Soil Sampling Analytical Results - 2010 Granulation Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-45	SB-45	SB-45	SB-45	SB-45	SB-45	SB-45	SB-46	SB-46	SB-46
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	9-10	14-15	19-20	23-24	0-1	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

Table D-7

Soil Sampling Analytical Results - 2010 Granulation Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-46 DUP 08/16/10 4-5	SB-46 INVE 08/16/10 9-10	SB-46 INVE 08/16/10 14-15	SB-46 INVE 08/16/10 15-16	SB-47 INVE 08/12/10 0-1	SB-47 DUP 08/12/10 0-1	SB-47 INVE 08/12/10 1-2	SB-47 INVE 08/12/10 4-5	SB-47 INVE 08/12/10 9-10	SB-48 INVE 08/12/10 0-1
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.78 U	-	-	-	2 U	4.2 U	13 U	0.63 U	-	1.5 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	5.5	1.8	3.9	2.8	4.6 J	5.6	25.1 J	3.3	4.6	4.9 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	160	-	-	-	97.3 J	95.8	134 J	150	-	98.5 J
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.76	-	-	-	1.2 J	3.2	6.5 U	0.81 J	-	0.79 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.62	-	-	-	51.8	105	13.4 J	0.31 U	-	24.4
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	21,200	-	-	-	35,200	46,200	153,000	16,400	-	27,000
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	20.2	-	-	-	252	810	130	22.4	-	114
Lead	80	NS/14	50	GWP	NS/14	13.59	10.9	-	-	-	12.9	19.3	8.8	9.7	-	9.7
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	5,040	-	-	-	7,680	12,600	2,500 J	11,000	-	6,020
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	15.4	-	-	-	64.2	138	41.8	70.3	14.2	36.1
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,510	-	-	-	1,250 J	2,030	5,220 J	2,900 J	-	1,240 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2	2 U	0.96 U	0.21 J	3.9 U	8.5 U	26 U	1.3 U	-	3 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	290 U	-	-	-	730 U	1920	4,900 U	240 U	-	798 J
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.78 U	-	-	-	1.1	2.2	1.3 U	0.13 U	-	0.66
Vanadium	520	78/NS	NS	NS	78/NS	22.68	27.3	-	-	-	401	1190	84.5 J	33.3	-	175
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	766	134	177	425	3,520	4,290	4,350	6,420	2,620	7,400
Fluoride	4,100	NS	7.4	GWP	3.95	7	3	-	-	-	15.4	16.1	5.4	1.4	-	6.7
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	14.7	-	-	-	228	195	23.6	62.6	7.8	787
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,680	-	-	-	5,070	6,700	70,000	9,020	-	6,450
Total Phosphorus	NS	NS	NS	NS	NS	NS	65	-	-	-	4,590	1,620	1,460	5,810	-	5,920
pH	NS	NS	NS	NS	NS	NS	7.64	-	-	-	5.6	5.43	6.18	6.57	-	5.49
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	15.8	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	14.5	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	0.76 U	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical path
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revise
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updatec

Table D-7

Soil Sampling Analytical Results - 2010 Granulation Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-46	SB-46	SB-46	SB-46	SB-47	SB-47	SB-47	SB-47	SB-47	SB-48
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		DUP	INVE	INVE	INVE	INVE	DUP	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/16/10	08/16/10	08/16/10	08/16/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	4-5	9-10	14-15	15-16	0-1	0-1	1-2	4-5	9-10	0-1

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluc

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentration

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the hur

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimi

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for ci

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for ci

Table D-7

Soil Sampling Analytical Results - 2010 Granulation Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-48 INVE 08/12/10 1-2	SB-48 INVE 08/12/10 4-5	SB-48 INVE 08/12/10 9-10	SB-48 INVE 08/12/10 14-15	SB-49 INVE 08/12/10 0-1	SB-49 INVE 08/12/10 1-2	SB-49 INVE 08/12/10 4-5	SB-49 INVE 08/12/10 9-10	SB-49 INVE 08/12/10 11-12
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway											
Metals (mg/kg)															
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	3.2 U	0.98 U	-	-	1.4 U	2.1 U	1.2 U	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.2 U	4 J	3.2	3.3	4.6 J	2.6 J	4.2 J	2.4	3.6
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	96.1 J	128	-	-	102 J	137 J	146	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	1.6 U	0.8 J	-	-	1.5 J	1.1 U	0.72 J	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	29.6	0.49 U	-	-	17.2	16.9	0.59 U	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	115,000	3,510	-	-	43,500	52,700	4,630	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	234	25.6	-	-	125	118	24.9	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	25.2	11.3	-	-	25.4	11.4	10.7	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	4,680 J	4,700	-	-	7,280	5,700	4,720	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	36.7	17.6	-	-	38	31.7	16.7	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	3,500 J	2,610 J	-	-	1,900 J	3,550 J	2,560 J	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	6.4 U	2 U	-	-	2.9 U	4.2 U	2.4 U	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,270 J	384 J	-	-	1,520 J	790 U	440 U	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.35 J	0.47 J	-	-	0.43	0.29 J	0.29 J	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	277	30.9	-	-	185	176	32.2	-	-
Wet Chemistry (mg/kg)															
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	3,920	1,780	2,370	2,550	3,330	1,200	2,950	24.6	398
Fluoride	4,100	NS	7.4	GWP	3.95	7	6.4	1.1 J	-	-	9.5	14.9	1.1 J	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	238	18.5	0.61 U	51.8	477	448	314	164	50.6
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	5,220	2,140	-	-	2,740	2,370	3,180	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	3,310	377	-	-	2,280	1,620	2,360	-	-
pH	NS	NS	NS	NS	NS	NS	6.98	7.82	-	-	5.94	5.86	7.46	-	-
Radiological (pCi/g)															
Gross alpha	NS	NS	NS	NS	NS	NS	57.5	-	-	-	-	14.8	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	34	-	-	-	-	16.3	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical path
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revise
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updatec

Table D-7

Soil Sampling Analytical Results - 2010 Granulation Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-48	SB-48	SB-48	SB-48	SB-49	SB-49	SB-49	SB-49	SB-49
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	1-2	4-5	9-10	14-15	0-1	1-2	4-5	9-10	11-12

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluc

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentration

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the hur

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimi

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for ci

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for ci

Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-50 INVE 08/18/10 0-1	SB-50 INVE 08/18/10 1-2	SB-50 INVE 08/18/10 4-5	SB-50 INVE 08/18/10 9-10	SB-50 INVE 08/18/10 13-14	SB-51 INVE 08/18/10 0-1	SB-51 INVE 08/18/10 1-2	SB-51 INVE 08/18/10 2-3	SB-52 INVE 08/17/10 0-1	SB-52 INVE 08/17/10 1-2
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	4 U	1.9 U	0.45 U	-	-	0.86 U	2.1 J	0.86 U	0.76 U	2.3 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	12.3 J	7.7 J	3.8	0.62 J	2	16	10.9	6	17.9	21.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	120 J	141 J	130	-	-	76.6 J	105 J	135 J	104	185 J
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	2 U	2.4 U	0.68 J	-	-	0.86 U	2 U	0.86 U	0.38 U	1.2 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	109	36.2	0.52 J	-	-	27.5	50.7	13.6	9.6	5.3
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	199,000	134,000	5,180	-	-	110,000	155,000	86,700	61,800	88,300
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	590	220	18.9	-	-	154	303	125	52.4	74.8
Lead	80	NS/14	50	GWP	NS/14	13.59	18.5	11	10.2	-	-	8.2	11.2 J	9.2	10.3	61
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	2,380 J	4,590 J	3,740	-	-	4,890	6,510 J	4,520	11,700	6,720
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	114	51.2	14.7	-	-	43.9	97	33.1	18.1	19.8
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	4,280 J	4,280 J	2,510	-	-	2,510 J	3,250 J	3,250 J	2,170 J	3,910 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	11.1 J	6.5 J	0.91 U	-	-	5 J	7.3 J	2.8 J	1.5 U	4.6 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,500 U	1,940 J	170 U	-	-	640 U	1,500 U	650 U	1,370 J	860 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	1.6 U	0.58	0.15 J	0.52 U	0.14 U	0.23 J	1.6 U	0.34 J	0.11 J	0.12 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	636	307	21.7	-	-	182	346	223	90.9	90.4
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	67.3	16.8	39.8	17.5	8.3	17.3	12.1	21.9	51.5	9.6
Fluoride	4,100	NS	7.4	GWP	3.95	7	43.5	24.7	1.1 J	-	-	21.2	28.4	29.9	52.9	11.4
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	12.1	6.1	2.4	-	-	12.3	19.8	5	0.54 U	24.2
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	974	684	1,240	-	-	496	522	921	342	578
Total Phosphorus	NS	NS	NS	NS	NS	NS	6,480	3,790	2,020	-	-	1,170	6,020	2,800	2,220	6,500
pH	NS	NS	NS	NS	NS	NS	6.58	8.09	7.59	-	-	6.86	7.45	7.65	6.98	8.05
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	41.6	-	-	-	-	56.2	-	-	41.9
Gross beta	NS	NS	NS	NS	NS	NS	-	37.2	-	-	-	-	37.1	-	-	33.7
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised

Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-50	SB-50	SB-50	SB-50	SB-50	SB-51	SB-51	SB-51	SB-52	SB-52
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/17/10	08/17/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	9-10	13-14	0-1	1-2	2-3	0-1	1-2

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
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- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-52 INVE 08/17/10 4-5	SB-52 INVE 08/17/10 9-10	SB-52 INVE 08/17/10 14-15	SB-52 INVE 08/17/10 19-20	SB-52 INVE 08/17/10 23-24	SB-53 INVE 08/18/10 0-1	SB-53 INVE 08/18/10 1-2	SB-53 INVE 08/18/10 4-5	SB-53 INVE 08/18/10 9-10	SB-53 INVE 08/18/10 14-15
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.52 U	-	-	-	-	2.2 J	0.93 U	3.2 U	0.34 J	0.53 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	4.6	0.45 J	4.5	4.6	2.8	7.2	4.3 J	7.3 J	2	3.3
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	151	-	-	-	-	272	130	214 J	107	110
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.63 J	-	-	-	-	1 U	0.75 J	1.6 U	0.32	0.79 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.31 J	0.43	0.94	0.81 J	0.81	34.5	8.5	29	3	3.3
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	29,000	-	-	-	-	81,900	101,000	170,000	248,000	14,600
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	17.5	-	-	-	-	160	48.3	167	7.9 J	31.8
Lead	80	NS/14	50	GWP	NS/14	13.59	10.1	0.47 J	9.1	14.8	8.7	125	8.7	27.9	4.7 J	10
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	6,950	-	-	-	-	5,720	6,550	5,160 J	3,440	7,460
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	16.2	-	-	-	-	44.2	20.4	31.8	88.1	24
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,980	-	-	-	-	3,810 J	2,720 J	5,690 J	1,380	2,940 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1 U	-	-	-	-	2.1 U	1.9 U	6.3 U	3.4 U	1.1 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	352 J	-	-	-	-	1,100 J	525 J	1730 J	148 J	400 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.18 J	0.63 U	0.41 J	0.11 U	0.62	0.44 J	0.093 U	0.79 U	0.85 U	0.15 J
Vanadium	520	78/NS	NS	NS	78/NS	22.68	27.1	-	-	-	-	226	114	206	8.5	40.4
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	44.2	46	7.9	14.3	165	245	31.2	28.6	130	33.7
Fluoride	4,100	NS	7.4	GWP	3.95	7	0.64 J	-	-	-	-	173	13.7	122	2.5	313
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	17.5	-	-	-	-	43.8	29.5	22.4	140	20
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	304	-	-	-	-	783	462	575	1,440	343
Total Phosphorus	NS	NS	NS	NS	NS	NS	1,410	-	-	-	-	4,090	2,390	7,090	2,620	1,060
pH	NS	NS	NS	NS	NS	NS	7.7	-	-	-	-	6.08	7.38	6.75	6.94	5.66
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	19.5	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	12.1	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated &

Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-52	SB-52	SB-52	SB-52	SB-52	SB-53	SB-53	SB-53	SB-53	SB-53
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	4-5	9-10	14-15	19-20	23-24	0-1	1-2	4-5	9-10	14-15

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorine.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA correspondence dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for current and future exposure.

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Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-53 DUP 08/18/10 14-15	SB-53 INVE 08/18/10 16-17	SB-54 INVE 08/18/10 0-1	SB-54 INVE 08/18/10 1-2	SB-54 INVE 08/18/10 4-5	SB-54 INVE 08/18/10 9-10	SB-54 DUP 08/18/10 9-10	SB-54 INVE 08/18/10 14-15	SB-54 INVE 08/18/10 17-18	SB-55 INVE 08/09/10 0-1
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1 U	-	0.77 U	1.7 U	0.51 U	0.46 U	0.47 U	0.42 U	-	0.93 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.6	2.8	3.4 J	3.5 J	5.2	5.4	5.4	4.2	5.5	10
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	95.7	-	185	93.4 J	150	166	132	92.3	-	64.2 J
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.68	-	0.79 J	1.9 J	0.78 J	0.69 J	0.57	0.55 J	-	0.51 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	4.2	2.7	14.4	60.8	1.6	0.49 J	0.35	1.4	6.9	8.9
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	17,200	-	60,500	180,000	14,000	50,200	35,500	38,500	-	118,000
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	32.7	-	72.7	245	20.9	18.2	18.2	16.8	-	56
Lead	80	NS/14	50	GWP	NS/14	13.59	9.9	-	10.2	5 J	9.8	9	9.2	8.6	-	8
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	8,380	-	6,310	1,640 J	2,350	6,170	5,190	9,760	-	19,900
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	24.6	-	19.9	35	51.8	15.6	16.4	15.6	35.6	19
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,340	-	7,350 J	4,290 J	3,760	2,140 J	2,300	1,780 J	-	2,100 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2 U	-	1.5 U	3.4 U	1.4 J	0.93 U	0.94 U	0.84 U	1 U	1.9 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	380 U	-	2,220 J	1,300 U	414 J	170 U	180 U	320 U	-	350 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.1 U	-	0.19 J	1.7 U	0.51	0.38 J	0.19	0.13 J	0.13 U	0.093 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	42.3	34.4	123	405	25.8	23.8	24.5	22.2	-	73.5
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	44	59.5	50.5	1,260	160	1,140	1,610	1,020	1,230	288
Fluoride	4,100	NS	7.4	GWP	3.95	7	193	48.1	700	37.7	0.6 U	0.98 J	0.71	4.4	-	34.4
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	26.3	15.4	11.2	71.1	165	151	153	41.1	30.8	116
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	327	-	376	1,030	521	1,540	2,610	1,730	-	556
Total Phosphorus	NS	NS	NS	NS	NS	NS	707	-	13,900	14,900	6,700	2,490	6,960	8,610	-	5,730
pH	NS	NS	NS	NS	NS	NS	5.65	-	5.26	6.45	4.6	7.23	6.98	7.65	-	6.91
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	156	-	-	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	89	-	-	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	32.5	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	0.54 U	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
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Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-53	SB-53	SB-54	SB-54	SB-54	SB-54	SB-54	SB-54	SB-55
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		DUP	INVE	INVE	INVE	INVE	INVE	DUP	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/18/10	08/09/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	14-15	16-17	0-1	1-2	4-5	9-10	9-10	14-15	0-1

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum

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Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Level Protection of Groundwater ^(e) Industrial Soil (mg/kg)	Idaho Department of Environmental Quality ^(b) Risk Based Critical Pathway Risk-Based/MCL-Based IDTLs (mg/kg)	Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-55 INVE 08/09/10 1-2	SB-55 INVE 08/09/10 4-5	SB-55 INVE 08/09/10 9-10	SB-55 INVE 08/09/10 14-15	SB-55 INVE 08/09/10 19-20	SB-55 INVE 08/09/10 24.5-25.5	SB-56 INVE 08/10/10 0-1	SB-56 INVE 08/10/10 1-2	SB-56 INVE 08/10/10 4-5	SB-56 INVE 08/10/10 9-10		
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1.7 U	0.82 U	0.22 J	0.6 U	-	-	0.099 U	0.42 U	0.52 U	0.54 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	7.6 J	4.8	0.88	3	4.3	4	2.4	3.9	5.1	3
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	181	159	74.1	69.6	-	-	122	126	144	107
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	1 J	0.77 J	0.2	0.63 J	-	-	0.4	0.57 J	1.5	0.52 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	45.7	0.41 U	0.65	2.4	-	-	4.9	10.9	37.8	2.9
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (I)	128,000	10,600	168,000	32,500	-	-	150,000	181,000	30,300	86,300
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	223	22	4.5	20.2	-	-	46.6	66.7	28.1	18
Lead	80	NS/14	50	GWP	NS/14	13.59	43.9	11.1	2.8 J	9.9	-	-	14.6	21.2	9.3	7.4
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	6,570	4,810	2,000	7,740	-	-	2,450	3,920	4,030	5,710
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	55.4	15.9	4 J	19.2	-	-	37.2	27.7	18.5	51
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (I)	4,580 J	2,860 J	857	1,610 J	-	-	1,340	1,970 J	3,550	1,510 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	3.4 J	1.6 U	1.6 U	1.2 U	-	-	2 U	2.1 U	1 U	1.1 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (I)	1,140 J	310 U	86 J	230 U	-	-	137 J	160 U	190 U	200 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	1.7 U	0.082 U	0.32 U	0.12 U	-	-	0.39 U	0.42 U	0.1 U	0.11 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	323	29.1	4.8	25.2	-	-	54.5	70.3	73.7	19.2
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	1,920	34.6	74	138	368	329	60.9	49.9	36.3	179
Fluoride	4,100	NS	7.4	GWP	3.95	7	111	4.3	1.5	0.8 J	-	-	5.1	14.1	29.5	3.1 U
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	75.8	53.2	25.7	24.6	33.2	36.4	120	16.6	35.9	224
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,080	492	1,810	298	-	-	893	1,060	500	1,720
Total Phosphorus	NS	NS	NS	NS	NS	NS	6,670	674	1,050	6,350	-	-	17,200	4,910	6,600	12,000
pH	NS	NS	NS	NS	NS	NS	6.01	7.16	7.28	7.26	-	-	7.03	7.1	6.04	6.15
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	57.7	-	-	-	-	-	-	14	-	-
Gross beta	NS	NS	NS	NS	NS	NS	41.9	-	-	-	-	-	-	8.9	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

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GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

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Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-55	SB-55	SB-55	SB-55	SB-55	SB-55	SB-56	SB-56	SB-56	SB-56
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/09/10	08/10/10	08/10/10	08/10/10	08/10/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	1-2	4-5	9-10	14-15	19-20	24.5-25.5	0-1	1-2	4-5	9-10

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

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j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

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l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

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Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-56 DUP 08/10/10 9-10	SB-56 INVE 08/10/10 14-15	SB-56 INVE 08/10/10 18.5-19.5	SB-57 INVE 08/10/10 0-1	SB-57 INVE 08/10/10 1-2	SB-57 DUP 08/10/10 1-2	SB-57 INVE 08/10/10 4-5	SB-57 INVE 08/10/10 9-10	SB-57 INVE 08/10/10 14-15	SB-57 INVE 08/10/10 19-20
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.47 U	0.4 U	-	2.1 U	1.7 U	-	2 U	0.32 J	0.59 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.7	4.9	4.9	8.1 J	8.7	-	3.7 J	2.8	4.8	6.2
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	110	132	-	156 J	101 J	-	127	116	152	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.58	0.71 J	-	1.5 J	0.85 U	-	1.1	0.44 J	0.81 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	5.7	0.88	1.9	54.7	17.5	-	37.8	0.74	1.1 J	0.49 J
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	89,500	31,000	-	74,800	46,800	-	74,800	159,000	34,600	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	14.9	14.9	-	297	160	-	-	14.7	19.3	-
Lead	80	NS/14	50	GWP	NS/14	13.59	7.3	9.9	-	35.5	9.3	-	17.3	6	10.5	11.6
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,900	6,770	-	7,460	2,180 J	-	5,410	3,890	5,960	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	77.8	19.7	-	81.6	58.2	-	67.5	12.5	19.1	19.5
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,780	1,640 J	-	3,840 J	2,380 J	-	3,630 J	1,370	2,130 J	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	0.93 U	0.8 U	-	5.6 J	6.4 J	-	4.1 U	2.1 U	1.2 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	170 U	150 U	-	800 U	640 U	-	760 U	79 U	220 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.093 U	0.08 U	-	1.4	0.51	-	0.34 J	1.1 U	0.12 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	15.8	22	-	456	123	-	265	10.9	22.6	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	190	827	803	2,200	1,270	-	5,020	3,560	4,280	3,730
Fluoride	4,100	NS	7.4	GWP	3.95	7	1.4	2.4	5.2	135	88.1	-	239	2	2.1	1.5
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	52.9	91	34.5	1,680	813	-	346	282	141	29.7
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,930	51.7	-	3,900	1,730	-	8,660	5,700	3,320	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	8,900	2,470	-	31,100	3,730	-	6,460	2,550	5,380	-
pH	NS	NS	NS	NS	NS	NS	6	6.84	-	5.55	5.36	-	6.87	8.01	8.15	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	16.3	17.2	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	10.8	13.5	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated &

Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-56	SB-56	SB-56	SB-57	SB-57	SB-57	SB-57	SB-57	SB-57
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		DUP	INVE	INVE	INVE	INVE	DUP	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	9-10	14-15	18.5-19.5	0-1	1-2	1-2	4-5	9-10	14-15

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cur

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Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-57 INVE 08/10/10 24-25	SB-58 INVE 08/10/10 0-1	SB-58 INVE 08/10/10 1-2	SB-58 INVE 08/10/10 4-5	SB-58 INVE 08/10/10 9-10	SB-58 INVE 08/10/10 14-15	SB-58 DUP 08/10/10 14-15
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway									
<u>Metals (mg/kg)</u>													
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	1.6 U	2 U	0.37 U	0.29 J	0.41 U	0.48 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	8.7	4.6 J	7.1 J	4.4	3.6	2.7	3.2
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	48.3	141	128	124	93.9	94.3
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	0.81 U	1.1	0.87 J	0.56	0.63 J	0.6
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.42 U	10.9	36	38.7	1.6	0.85	0.85
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	120,000	58,500	24,100	212,000	24,400	26,500
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	88.4	253	19.5	12.7	17.9	18
Lead	80	NS/14	50	GWP	NS/14	13.59	11.2	2.7 J	13.8	9.2	5.5	9.2	9
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	62,000	16,100	2,610	5,030	9,850	9,430
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	20	28.3 J	62.3	57.2	10.6	16.2	16.2
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	1,240 J	3,690 J	3,450	1,940	1,970 J	1,880
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	3.2 U	3.9 U	0.74 U	2.3 J	0.83 U	0.97 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	610 U	801 J	564 J	204	159 J	222
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	1.6 U	0.71	0.092 U	0.11 U	0.1 U	0.097 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	97.2	275	27.2	15.5	23.2	28.4
<u>Wet Chemistry (mg/kg)</u>													
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	4,240	24.4	1,740	2,060	4,770	2,630	2,790
Fluoride	4,100	NS	7.4	GWP	3.95	7	0.6 U	32.7	50.3	1.5	2.5	1.4	1.3
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	43	182	511	348	141	166	186
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	372	1,470	4,200	9,380	3,730	3,710
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	1,460	5,450	8,880	11,800	2,170	1,230
pH	NS	NS	NS	NS	NS	NS	-	7.31	5.67	5.27	7.78	7.64	7.63
<u>Radiological (pCi/g)</u>													
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	15.6	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	15.8	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated &

Table D-8

Soil Sampling Analytical Results - 2010 Process Sewer Lagoon Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-57	SB-58	SB-58	SB-58	SB-58	SB-58	SB-58
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	DUP
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	24-25	0-1	1-2	4-5	9-10	14-15	14-15

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cur

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cur

Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-59 INVE 08/17/10 0-1	SB-59 INVE 08/17/10 1-2	SB-59 DUP 08/17/10 1-2	SB-59 INVE 08/17/10 4-5	SB-60 INVE 08/17/10 0-1	SB-60 INVE 08/17/10 1-2	SB-60 INVE 08/17/10 4-5	SB-60 INVE 08/17/10 6-7	SB-61 INVE 08/17/10 0-1	SB-61 INVE 08/17/10 1-2
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	2 U	0.75 U	-	8.9 U	1.7 U	0.8 U	1 U	-	1.8 U	1.7 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	8.6 J	3.1 J	-	10.8 J	9.2	3.5 J	6	3.9	5.4 J	5.7 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	189	114	-	318 J	173	112	114	-	146	209
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	2 U	0.37 U	-	4.5 U	0.86 U	0.43 J	0.52 U	-	0.9 U	0.87 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	20.9	13.3	-	11.3 J	25.5	8.3	23.4	1.1	15.1	5.6
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	122,000	110,000	-	49,200	89,600	88,000	18,700	-	62,200	41,300
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	124	74.3	-	228	143	56.5	113	-	89.4	42.8
Lead	80	NS/14	50	GWP	NS/14	13.59	17.3	10.4	-	21.4	40.3	6.7	56.8	10.8	12.5	10.6
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	15,100	13,000	-	3,900 J	11,800	11,500	2,340 J	-	9,030	4,330
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	30	23.3	-	10.2	37.7	18.5	36.9	-	26.6	18.8
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	5,330 J	3,890	-	6,740 J	4,890 J	2,930 J	1,910 J	-	3,940 J	1,850 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	4 U	1.5 U	-	18 U	3.5 U	1.6 U	5.2 J	0.91 U	3.6 U	3.5 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,500 J	2,180 J	-	3,300 U	2,380 J	708 J	390 U	-	1,050 J	650 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.2 J	0.75 U	-	0.37 J	0.099 J	0.12	0.42 J	0.12 U	0.22	0.087 J
Vanadium	520	78/NS	NS	NS	78/NS	22.68	173	107	-	240	236	81	136	-	164	63.3
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	148	83.2	-	367	68.3	9.9	451	772	168	26
Fluoride	4,100	NS	7.4	GWP	3.95	7	248	266	-	621	92.2	183	16.8	1.1 J	53.7	338
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	27.2	18.9	-	17.9	18.1	11.6	22	0.67 U	75.6	30.4
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	434	196	-	1,010	588	3,290	1,400	-	365	321
Total Phosphorus	NS	NS	NS	NS	NS	NS	11,500	3,150	-	15,200	3,140	4,260	7,710	-	5,300	5,590
pH	NS	NS	NS	NS	NS	NS	6.16	6.18	-	4.01	5.59	6.34	5.85	-	5.22	6.61
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	13.6	14.4	-	-	15.1	-	-	-	54
Gross beta	NS	NS	NS	NS	NS	NS	-	10.9	16.2	-	-	11.5	-	-	-	37.7
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-59	SB-59	SB-59	SB-59	SB-60	SB-60	SB-60	SB-60	SB-61	SB-61
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	1-2	4-5	0-1	1-2	4-5	6-7	0-1	1-2

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

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d/ Idaho Risk Reduction Manual, July 2004.

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- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

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Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-61 INVE 08/17/10 4-5	SB-61 INVE 08/17/10 5.5-6.5	SB-62 INVE 08/17/10 0-1	SB-62 INVE 08/17/10 1-2	SB-62 INVE 08/17/10 4-5	SB-62 INVE 08/17/10 9-10	SB-62 INVE 08/17/10 14-15	SB-62 INVE 08/17/10 19-20	SB-63 INVE 08/10/10 0-1	SB-63 INVE 08/10/10 1-2
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	10 U	-	1.4 U	3.7 U	3.1 U	-	-	-	0.41 U	2.3 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	24 J	5.9	4.4 J	4.1 J	6.5 J	3	7.3	5.3	1.8 J	3.2 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	402 J	521	88 J	158	81.4	-	-	-	85.9	150
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	10 U	0.65 J	0.69 U	1.8 U	1.6 U	-	-	-	0.21 J	1.1 U
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	5.2 U	-	15.2	26.1	17.1	0.71	7.4	5.7	3.6	39.9
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	73,500	-	82,900	117,000	217,000	-	-	-	161,000	149,000
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	100	-	92.4	120	307	-	-	-	25.2	179
Lead	80	NS/14	50	GWP	NS/14	13.59	24.7	23	9.7	3.3	11.8	-	-	-	10.3	19.4
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	1,190 J	-	9,290	7,260 J	6,640 J	-	-	-	7,370	7,090
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	4.1	-	28.7	21	25	-	-	-	18.7	46.6
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	5,200 U	-	1,770 J	3,350 J	5,610 J	-	-	-	937 J	2,360 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	21 U	-	4.1	7.4 U	8.5	0.84 U	0.66 U	0.9 U	1.6 U	4.5 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	7,800 U	-	1,950	3,040 J	2,690	-	-	-	803 J	840 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	1.1	3.3	0.69 U	1.8 U	1.6	0.14 U	0.11 U	0.26 J	0.082 U	0.47 J
Vanadium	520	78/NS	NS	NS	78/NS	22.68	140 J	-	143	217	322	15	54.8	65.8	49.4	243
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	673	872	48.7	106	16.7	655	692	194	30.4	2,070
Fluoride	4,100	NS	7.4	GWP	3.95	7	579	74.5	33.5	33	20.2	1.7	642	838	85.9	188
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	6.5	-	38	49.2	54.1	0.6 U	0.61 U	0.61 U	106	103
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,690	-	611	307	373	-	-	-	279	1,930
Total Phosphorus	NS	NS	NS	NS	NS	NS	6,200	-	4,690	5,740	6,040	-	-	-	1,060	4,520
pH	NS	NS	NS	NS	NS	NS	5.17	-	6.85	7.03	8.78	-	-	-	6.65	6.4
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	47.8	-	-	-	-	-	29.1
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	31.4	-	-	-	-	-	17.8
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

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INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

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Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-61	SB-61	SB-62	SB-62	SB-62	SB-62	SB-62	SB-62	SB-63	SB-63
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/17/10	08/10/10	08/10/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	4-5	5.5-6.5	0-1	1-2	4-5	9-10	14-15	19-20	0-1	1-2

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum

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	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.81 U	-	-	-	2.4	2.4 U	0.44 J	-	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3 J	2.9	6.1	5.4	6.4 J	4.9 J	2.6	3.1	3.9	4.5
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	159	-	-	-	144 J	130 J	153	-	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.78 J	-	-	-	1.2 J	1.5	0.81 J	-	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	22.4	0.4 J	0.23 U	0.27 U	57	143	0.51	-	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	26,900	-	-	-	118,000	83,700	25,600	-	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	21.1	-	-	-	242	471	22.4	-	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	10.8	-	-	-	12.4	18.5	9.6	-	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	4,610	-	-	-	7,870	5,680 J	6,400	-	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	68.1	14.9	20.9	22.8	68.2	63.7	57.1	13.5	16.3	25.4
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	3,410 J	-	-	-	4,270 J	3,840 J	3,000 J	-	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.6 U	-	-	-	4.7 U	4.8 U	0.69 J	-	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	300 U	-	-	-	2,140 J	1,480 J	230 U	-	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.27 J	-	-	-	0.98	1.5 J	0.14 J	-	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	49.9	-	-	-	374	961	81.5	-	-	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	3,390	2,340	4,280	4,190	8.9	6	5.8	5,990	3,290	2,340
Fluoride	4,100	NS	7.4	GWP	3.95	7	17.7	1.7	1.8	1.4	197	47.3	0.63 U	-	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	35.8	13.8	2.7	7	378	61.8	48	12.7	20.2	5.1
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	5,410	-	-	-	5,870	7,880	6,140	-	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,980	-	-	-	32,100	12,000	2,480	-	-	-
pH	NS	NS	NS	NS	NS	NS	6.79	-	-	-	5.75	5.43	6.87	-	-	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	86	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	62	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	12.7	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	0.8 U	-	-	-	-

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Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10	08/10/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	4-5	9-10	14-15	19-20	0-1	1-2	4-5	9-10	14-15

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Methods for sample preparation include SW-846 3050B for metals.

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	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	3.5 U	4.1 U	0.8 U	-	-	-	3.3 U	3.4 U	0.42 U	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	10.6 J	4.1 U	3.9 J	6	3.2	13.5	6.7 J	4.9 J	3.9	1.6
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	49.9 J	128 J	154	-	-	-	173 J	145	155	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	1.8 U	2 U	0.77 J	-	-	-	1.6 U	1.7 U	0.68 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	3.9 J	6.3 J	0.4 U	-	-	-	29.7	21.6	0.35 J	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	87,700	169,000	3,290	-	-	-	144,000	207,000	32,800	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	98.2	170	24.5	-	-	-	652	241	17.6	-
Lead	80	NS/14	50	GWP	NS/14	13.59	1.7	3.9	10.8	-	-	-	19.2	15.3 J	8.8	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	1,200 J	3,920 J	4,030	-	-	-	7,870 J	2,680 J	6,570	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	37.8	26.7	16.3	-	-	-	51.7	53.4 J	15.1	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,290 J	4,790 J	3,080 J	-	-	-	2,350 J	5,130 J	2,920	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	7.1 U	8.1 U	1.6 U	-	-	-	6.6 U	6.7 U	0.84 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,300 U	1,500 U	300 U	-	-	-	2,310 J	2,640 J	160 U	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.088 U	0.1 U	0.21 J	-	-	-	0.72	3.4 U	0.084 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	133	194	28.2	-	-	-	276	302	25.2	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	2,570	1,300	1,280	7,630	4,720	183	807	791	1,240	5,030
Fluoride	4,100	NS	7.4	GWP	3.95	7	5.2	9.8	0.8 J	-	-	-	2.5	10.8	2.3	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	74.5	14.3	16.3	-	-	-	47.1	137	101	244
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,410	1,880	6,310	-	-	-	3,760	2,190	7,220	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,610	1,280	581	-	-	-	4,870	2,620	7,060	-
pH	NS	NS	NS	NS	NS	NS	7.52	8.45	6.61	-	-	-	7.69	8.25	6.46	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	89	-	-	-	-	-	78	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	63	-	-	-	-	-	49.8	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

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Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-65	SB-65	SB-65	SB-65	SB-65	SB-65	SB-66	SB-66	SB-66	SB-66
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	9-10	14-15	19-20	0-1	1-2	4-5	9-10

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.
ASTM source: American Society for Testing and Materials.
Methods for sample preparation include SW-846 3050B for metals.
ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid
Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>
c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>
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f/ background as per EPA coresponance dated April 19, 2012, except where noted)
g/ Comparative values are defined as:
 ▪ the lower of the human health screening levels, unless this value is below background
 ▪ if the human health screening level is above background, then it is the CV
 ▪ if the human health screening level is below background, then background is the CV
h/ provided by Accutest Laboratories.
i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.
k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.
l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.
m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative exposure.
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Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-66 INVE 08/13/10 14-15	SB-66 INVE 08/13/10 19-20	SB-66 INVE 08/13/10 20-21	SB-67 INVE 08/13/10 0-1	SB-67 INVE 08/13/10 1-2	SB-67 INVE 08/13/10 4-5	SB-67 INVE 08/13/10 9-10	SB-67 INVE 08/13/10 14-15	SB-67 INVE 08/13/10 19-20	SB-67 INVE 08/13/10 22-23
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	-	-	1.9 U	0.089 U	0.8 U	-	-	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.6	5.5 J	5.9	6.4 J	0.54	3.3 J	7.2	7.9	5.6	6.6
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	-	-	113	12.8	166	-	-	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	-	-	0.96	0.17 J	0.74 J	-	-	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	-	-	-	31.1	1.1	0.48 J	-	-	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	-	-	87,900	128,000	14,400	-	-	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	-	-	244	145	20.4	-	-	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	-	-	-	19.6	2.1 J	10.9	-	-	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	-	-	3,900 J	227	4,160	-	-	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	-	-	57.10	44.4	14.9	-	-	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	-	-	1,980 J	517	2,660 J	-	-	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	-	-	3.7 U	1.8 U	1.6 U	-	-	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	-	-	700 U	237 J	300 U	-	-	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	-	-	0.12 J	1.8 U	0.13 J	-	-	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	-	-	247	36.2	25.9	-	-	-	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	2,540	5,020	2,990	535	307	1,510	5,390	4,060	3,700	2,980
Fluoride	4,100	NS	7.4	GWP	3.95	7	-	-	-	8.6	4	2.7	-	-	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	211	24.3	1.5	42.5	46.5	70.6	11.9	62.2	37.4	39.8
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	-	-	4,660	880	3,870	-	-	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	-	-	1,260	12,900	4,930	-	-	-	-
pH	NS	NS	NS	NS	NS	NS	-	-	-	7.94	8.73	7.36	-	-	-	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	95	-	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	63	-	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	45.5	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	NS	-	-	-	-	0.51 U	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

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Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-66	SB-66	SB-66	SB-67	SB-67	SB-67	SB-67	SB-67	SB-67
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10	08/13/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	14-15	19-20	20-21	0-1	1-2	4-5	9-10	14-15	22-23

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

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f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

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h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

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Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-68 INVE 08/16/10 0-1	SB-68 INVE 08/16/10 1-2	SB-68 INVE 08/16/10 4-5	SB-68 INVE 08/16/10 9-10	SB-68 INVE 08/16/10 14-15	SB-68 INVE 08/16/10 19-20	SB-68 INVE 08/16/10 21.5-22.5	SB-69 INVE 08/16/10 0-1	SB-69 INVE 08/16/10 1-2	SB-69 INVE 08/16/10 4-5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	2 U	0.81 U	0.87 U	-	-	-	-	0.83 U	1 U	0.5 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	5.1 J	6.3	5.1	2.1	5.2	5.1	4.9	5	4.5 J	4.4
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	128 J	181	153	-	-	-	-	92.7	124	154
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	1.4 J	0.9 J	0.68 J	-	-	-	-	1.1 J	0.81 J	0.74 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	62.9	6	0.46 J	-	-	-	-	37.9	18.6	0.47 J
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	83,300	14,800	44,000	-	-	-	-	50,400	31,400	28,200
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	338	24.1	18.8	-	-	-	-	182	57.1	16.4
Lead	80	NS/14	50	GWP	NS/14	13.59	28.3	11.1	9.4	-	-	-	-	16.9	8.8	9.4
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	5,860	4,110	6,610	-	-	-	-	4,510	3,250	6,450
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	57.6	30.4	15.4	-	-	-	-	53.2	54.6	15
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,740 J	2,790 J	1,960 J	-	-	-	-	1,880 J	2,270 J	2,440 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	3.9 U	2.2 J	1.7 U	-	-	-	-	2.7 J	3.5 J	1.4 J
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	1,200 J	300 U	330 U	-	-	-	-	780 J	421 J	190 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.098 U	0.081 U	0.87 U	-	-	-	-	0.083 U	0.1 U	1 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	434	66.2	27.3	-	-	-	-	297	145	36.8
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	2,170	941	402	423	289	1,780	183	5,010	2,350	3,180
Fluoride	4,100	NS	7.4	GWP	3.95	7	168	8.7	1.7	-	-	-	-	18.8	14.4	0.63 U
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	238	36.6	59.2	7	5.5	25	19.4	185	37.9	23.9
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	2,010	2,210	962	-	-	-	-	10,900	1,150	6,130
Total Phosphorus	NS	NS	NS	NS	NS	NS	8,390	850 U	85	-	-	-	-	16,300	3,700	4,980
pH	NS	NS	NS	NS	NS	NS	5.88	5.86	7.79	-	-	-	-	5.88	5.92	7.02
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	12.8	-	-	-	-	-	-	16.8	-
Gross beta	NS	NS	NS	NS	NS	NS	-	8.7	-	-	-	-	-	-	14.1	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

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GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

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IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

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Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10	08/16/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	9-10	14-15	19-20	21.5-22.5	0-1	1-2	4-5

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h/ provided by Accutest Laboratories.
i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.
k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level.
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	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	-	-	-	-	1.8 U	1.6 U	1.8 U	-	7.7 J	10.8
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.8	8.9	4.2	4.1	5.2 J	4.7 J	6.1 J	7.3	7 J	10.8
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	-	-	-	-	159 J	168	210	-	192 J	289
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	-	-	-	-	1.1 J	0.95 J	0.96 J	-	1.3 J	1.9
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	-	-	-	-	26.8	3.1	1.1 J	-	51.1	115
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	-	-	-	-	50,600	24,600	4,450	-	57,500	76,100
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	-	-	-	-	148	40.3	24	-	286	443
Lead	80	NS/14	50	GWP	NS/14	13.59	-	-	-	-	14.2	10.3	12.7	-	52	104
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	-	-	-	-	5,480	4,130	4,360 J	-	5,430	7,300
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	-	-	-	-	34.7	27.2	17.8	-	104	130
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	-	-	-	-	2,980 J	2,860 J	3,800 J	-	4,320 J	3,750
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	-	-	-	-	3.6 U	3.1 U	3.5 U	-	4.7 J	5.3
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	-	-	-	-	874 J	590 U	660 U	-	740 U	1,660
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	-	-	-	-	0.33 J	0.079 U	0.088 U	-	0.4 J	0.27
Vanadium	520	78/NS	NS	NS	78/NS	22.68	-	-	-	-	253	88.5	45.4	-	338	616
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	3,640	1,300	2,610	1,680	6.9	2	0.71 U	-	4,360	4,700
Fluoride	4,100	NS	7.4	GWP	3.95	7	-	-	-	-	50.1	17.5	0.6 U	-	46.7	93.4
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	40.7	8	27	39	32.1	32.4	29.6	10.7	333	287
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	-	-	-	-	1,890	742	380	-	5,360	10,500
Total Phosphorus	NS	NS	NS	NS	NS	NS	-	-	-	-	3,960	8,130	9,800	-	7,240	4,050
pH	NS	NS	NS	NS	NS	NS	-	-	-	-	5.32	4.92	4.57	-	5.91	5.77
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	6.8	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	5.5	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated a

Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-69	SB-69	SB-69	SB-69	SB-70	SB-70	SB-70	SB-70	SB-71	SB-71
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	DUP
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/16/10	08/16/10	08/16/10	08/16/10	08/13/10	08/13/10	08/13/10	08/13/10	08/16/10	08/16/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	9-10	14-15	19-20	20-21	0-1	1-2	4-5	6.5-7.5	0-1	0-1

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.
ASTM source: American Society for Testing and Materials.
Methods for sample preparation include SW-846 3050B for metals.
ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid
Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>
c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>
d/ Idaho Risk Reduction Manual, July 2004.
e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>
f/ background as per EPA coresponance dated April 19, 2012, except where noted)
g/ Comparative values are defined as:
 ▪ the lower of the human health screening levels, unless this value is below background
 ▪ if the human health screening level is above background, then it is the CV
 ▪ if the human health screening level is below background, then background is the CV
h/ provided by Accutest Laboratories.
i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.
k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health screening level was not provided.
l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.
m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum reporting limits.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative exposure.
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Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-71 INVE 08/16/10 1-2	SB-71 DUP 08/16/10 1-2	SB-71 INVE 08/16/10 4-5	SB-71 INVE 08/16/10 5-6
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway						
<u>Metals (mg/kg)</u>										
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	1 U	-	0.12 J	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.9 J	-	2.4	2.4
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	147	-	186	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.94 J	-	0.62 J	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	1.3 J	-	0.25	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	64,700	-	62,700	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	49.6	-	15	-
Lead	80	NS/14	50	GWP	NS/14	13.59	7.8	-	8.2	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,400	-	2,910	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	44.9	-	32.2	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	4,690 J	-	2,800	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2.9 J	-	0.24 U	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	923 J	-	304 J	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.1 U	-	0.12 U	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	96.8	-	29.5	-
<u>Wet Chemistry (mg/kg)</u>										
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	2,540	-	1,180	1,200
Fluoride	4,100	NS	7.4	GWP	3.95	7	12.8	-	0.64 U	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1,670	-	640	1,010
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	2,030	-	1,260	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	3,730	-	6,960	-
pH	NS	NS	NS	NS	NS	NS	6.25	-	4.77	-
<u>Radiological (pCi/g)</u>										
Gross alpha	NS	NS	NS	NS	NS	NS	19.8	66	-	-
Gross beta	NS	NS	NS	NS	NS	NS	24.2	51.9	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity; "m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated a

Table D-9

Soil Sampling Analytical Results - 2010 Dry Products Storage East Ditch
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-71	SB-71	SB-71	SB-71
Sample Type:	Protection of		<u>of Environmental Quality</u> ^(b)		Background		INVE	DUP	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/16/10	08/16/10	08/16/10	08/16/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	1-2	1-2	4-5	5-6

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluorid

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cun

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cun

Table D-10

Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-72 INVE 08/03/10 0-1	SB-72 INVE 08/03/10 1-2	SB-72 INVE 08/03/10 4-5	SB-72 INVE 08/03/10 9-10	SB-72 INVE 08/03/10 14-15	SB-72 INVE 08/03/10 19-20	SB-72 INVE 08/03/10 24-25	SB-72 INVE 08/03/10 29-30	SB-72 INVE 08/03/10 31-32	SB-73 INVE 08/03/10 0-1
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.53 U	0.45 U	0.42 U	-	-	-	-	-	-	0.49 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.8	4.0	4.1	4.9	4.2	3.5	5.8	4.3	8.4	4.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	126	132	132	-	-	-	-	-	-	133
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.71 J	0.70 J	0.76 J	-	-	-	-	-	-	0.74 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.99 J	0.34 J	0.28 J	-	-	-	-	-	-	0.42 J
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	7,540	6,600	4,990	-	-	-	-	-	-	5,090
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	23	19.2	21.5	-	-	-	-	-	-	19.8
Lead	80	NS/14	50	GWP	NS/14	13.59	10.8	10.8	10.9	-	-	-	-	-	-	11.5
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,980	3,740	4,140	-	-	-	-	-	-	3,230
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	17.8	16.6	18.5	-	-	-	-	-	-	15.3
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,540 J	2,290	1,960 J	-	-	-	-	-	-	3,030
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.1 U	0.9 U	1.2 J	-	-	-	-	-	-	0.99 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	715 J	484 J	160 U	-	-	-	-	-	-	190 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.11 U	0.09 U	0.083 U	-	-	-	-	-	-	0.99 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	30.2	24	26.4	-	-	-	-	-	-	24
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	68.3	65.5	49.5	9.1	8	5.9	6.1	2.9	3.5	99.9
Fluoride	4,100	NS	7.4	GWP	3.95	7	35.4	52.1	19.4	3.3	1.9	1.3	1.8	1.7	1.8	27.6
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1.5	0.95 J	0.98 J	-	-	-	-	-	-	2.3
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	782	917	494	-	-	-	-	-	-	1,390
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,590	2,070	1,360	-	-	-	-	-	-	1,700
pH	NS	NS	NS	NS	NS	NS	8.54	7.72	6.58	-	-	-	-	-	-	6.57
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	4.8	-	-	-	-	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	4.1	-	-	-	-	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

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GWP = Groundwater protection.

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"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

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UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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Table D-10

Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-72	SB-72	SB-72	SB-72	SB-72	SB-72	SB-72	SB-72	SB-72	SB-73
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	1-2	4-5	9-10	14-15	19-20	24-25	29-30	31-32	0-1

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

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- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

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Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-73 INVE 08/03/10 1-2	SB-73 INVE 08/03/10 4-5	SB-73 INVE 08/03/10 9-10	SB-73 INVE 08/03/10 14-15	SB-73 INVE 08/03/10 19-20	SB-73 INVE 08/03/10 24-25	SB-73 INVE 08/03/10 29-30	SB-73 INVE 08/03/10 31.5-32.5	SB-74 INVE 08/03/10 0-1	SB-74 INVE 08/03/10 1-2
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.40 U	0.43 U							0.5 U	0.51 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.8	4.8	3.9	4.4	4	5.6	5	3	4.2	3.8
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	137	146	-	-	-	-	-	-	83.7	63.5
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.75 J	0.86 J	-	-	-	-	-	-	0.52 J	0.47 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.38 J	0.22 J	-	-	-	-	-	-	5	4.4
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (I)	4,700	4,450	-	-	-	-	-	-	49,800	52,500
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	19	23.4	-	-	-	-	-	-	36.6	39.7
Lead	80	NS/14	50	GWP	NS/14	13.59	11.4	11.4	-	-	-	-	-	-	6.4	6.1
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	3,230	4,650	-	-	-	-	-	-	12,000	13,000
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	15.2	19.7	-	-	-	-	-	-	28.8	23.4
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (I)	3,180	1,790 J	-	-	-	-	-	-	1,470 J	1,450 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	0.81 U	0.87 U	-	-	-	-	-	-	2.2 J	2.2 J
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (I)	150 U	160 U	-	-	-	-	-	-	400 J	190 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.81 U	0.087 U	-	-	-	-	-	-	0.099 U	0.1 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	22.5	30	-	-	-	-	-	-	50.9	48.2
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	99	24.6	6.9	10.6	2.3	6.3	3.2	1.6	13.9	129
Fluoride	4,100	NS	7.4	GWP	3.95	7	34.5	2	-	-	-	-	-	-	7.1	111
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	3.3	1.9	-	-	-	-	-	-	1.9	1.3
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,330	412	-	-	-	-	-	-	316	363
Total Phosphorus	NS	NS	NS	NS	NS	NS	3,760	1,200	-	-	-	-	-	-	4,340	1,080
pH	NS	NS	NS	NS	NS	NS	6.44	6.76	-	-	-	-	-	-	6.63	6.64
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	3.4	-	-	-	-	-	-	-	-	13.2
Gross beta	NS	NS	NS	NS	NS	NS	3.35	-	-	-	-	-	-	-	-	8.5
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	2.97
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	0.74 U

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.
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Table D-10

Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-73	SB-73	SB-73	SB-73	SB-73	SB-73	SB-73	SB-73	SB-74	SB-74
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	1-2	4-5	9-10	14-15	19-20	24-25	29-30	31.5-32.5	0-1	1-2

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.
ASTM source: American Society for Testing and Materials.
Methods for sample preparation include SW-846 3050B for metals.
ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluori
Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>
c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>
d/ Idaho Risk Reduction Manual, July 2004.
e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>
f/ background as per EPA coresponance dated April 19, 2012, except where noted)
g/ Comparative values are defined as:
 ▪ the lower of the human health screening levels, unless this value is below background
 ▪ if the human health screening level is above background, then it is the CV
 ▪ if the human health screening level is below background, then background is the CV
h/ provided by Accutest Laboratories.
i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations
k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma
l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.
m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimur

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cui
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Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-74 DUP 08/03/10 1-2	SB-74 INVE 08/03/10 4-5	SB-74 INVE 08/03/10 9-10	SB-74 INVE 08/03/10 14-15	SB-74 INVE 08/03/10 19-20	SB-74 INVE 08/03/10 24-25	SB-74 INVE 08/03/10 29-30	SB-75 INVE 08/03/10 0-1	SB-75 INVE 08/03/10 1-2	SB-75 INVE 08/03/10 4-5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.51 U	1.2 U	-	-	-	-	-	0.39 U	0.39 U	0.6 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	3.9	5.5 J	2.8	5.3	5.8	6.8	NR	3.9	4.1	4.5
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	59.5	154	-	-	-	-	-	119	139	117
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.45	0.81 J	-	-	-	-	-	0.5 J	0.58 J	0.66 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	5.1	1.6 J	-	-	-	-	-	1	0.39 J	0.3 U
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	65,100	23,900	-	-	-	-	-	35,200	4,730	4,500
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	44.4	41.4	-	-	-	-	-	24.1	18.1	23.6
Lead	80	NS/14	50	GWP	NS/14	13.59	5.7	12.2	-	-	-	-	-	9.3	11.9	12.1
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	18,300	4,000	-	-	-	-	-	10,100	3,660	4,600
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	26.1	16.6	-	-	-	-	-	15.9	15.5	18.8
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	1,330	4,020 J	-	-	-	-	-	2,460	3,180	2,830 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	2.7	2.4 U	-	-	-	-	-	0.78 U	0.77 U	1.2 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	190 U	440 U	-	-	-	-	-	150 U	150 U	220 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.1 U	1.2 U	-	-	-	-	-	0.78 U	0.077 U	0.12 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	53.7	56.1	-	-	-	-	-	32.3	22.4	28.2
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	86	96.7	7.4	7	5.9	2.8	2.2	62.1	100	49.3
Fluoride	4,100	NS	7.4	GWP	3.95	7	43.9	47.2	1.2	1.1 J	1.1 J	1.3	0.82 J	9.7	18	13
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1.3	4.4	-	-	-	-	-	1.5	1.3	1.3
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	357	1,230	-	-	-	-	-	1,120	1,640	781
Total Phosphorus	NS	NS	NS	NS	NS	NS	2,930	1,100	-	-	-	-	-	686	515	1,150
pH	NS	NS	NS	NS	NS	NS	6.1	6.59	-	-	-	-	-	6.09	6.82	6.09
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	5.1	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	-	-	-	4.8	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
J = Estimated result.
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INVE = Investigative sample.
DUP = Blind duplicate.
MS = Matrix spike.
NS = No regulatory criteria established.
GWP = Groundwater protection.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathv
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

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EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated ;

Table D-10

Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-74	SB-74	SB-74	SB-74	SB-74	SB-74	SB-74	SB-75	SB-75	SB-75
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	1-2	4-5	9-10	14-15	19-20	24-25	29-30	0-1	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluori

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

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f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

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Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
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Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-75 DUP 08/03/10 4-5	SB-75 INVE 08/03/10 9-10	SB-75 INVE 08/03/10 14-15	SB-75 INVE 08/03/10 19-20	SB-76 INVE 08/03/10 0-1	SB-76 INVE 08/03/10 1-2	SB-76 INVE 08/03/10 4-5	SB-76 INVE 08/03/10 9-10	SB-76 INVE 08/03/10 14-15	SB-76 INVE 08/03/10 19-20
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.57 U	-	-	-	0.42 U	0.52 U	0.48 U	-	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	4.9	3.2	4.3	5.7	4.6	5.0	5.0	3.3	3.7	4.3
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	120	-	-	-	134	147	126	-	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.7	-	-	-	0.63 J	0.58 J	0.69 J	-	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.29 U	-	-	-	0.28 J	0.75 J	0.24 U	-	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	4,860	-	-	-	3,910	8,320	3,940	-	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	25.3	-	-	-	19.9	19.9	23.9	-	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	12.1	-	-	-	11.9	12.4	12.1	-	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	5,020	-	-	-	3,610	4,260	4,310	-	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	19.2	-	-	-	15	16	18.5	-	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,960	-	-	-	3,180	3,400	2,760	-	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.1 U	-	-	-	0.84 U	1 U	0.96 U	-	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	220 U	-	-	-	160 U	190 U	248 J	-	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.11 U	-	-	-	0.084 U	0.1 U	0.096 U	-	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	30	-	-	-	24.9	25.6	27.8	-	-	-
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	57.1	3.4	7.1	6.6	131	83.7	64.5	7.1	5.2	2.7
Fluoride	4,100	NS	7.4	GWP	3.95	7	17.1	8.5	23.4	5.8	9.6	9.2	7.1	-	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1.3	-	-	-	0.6 U	1.3	1.4	-	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	785	-	-	-	1,590	908	753	-	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	654	-	-	-	988	908	312	-	-	-
pH	NS	NS	NS	NS	NS	NS	6.29	-	-	-	6.72	5.08	6.35	-	-	-
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	-	-	-	5.4	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	-	-	-	4.0	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.
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IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;
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Table D-10

Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-75	SB-75	SB-75	SB-75	SB-76	SB-76	SB-76	SB-76	SB-76	SB-76
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	4-5	9-10	14-15	19-20	0-1	1-2	4-5	9-10	14-15	19-20

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.
ASTM source: American Society for Testing and Materials.
Methods for sample preparation include SW-846 3050B for metals.
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Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>
c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>
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h/ provided by Accutest Laboratories.
i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
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Nu-West Industries, Inc.
Conda Phosphate Operations Facility
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Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-76 INVE 08/03/10 21.5-22.5	SB-77 INVE 08/03/10 0-1	SB-77 INVE 08/03/10 1-2	SB-77 INVE 08/03/10 4-5	SB-77 INVE 08/03/10 9-10	SB-77 INVE 08/03/10 14-15	SB-77 INVE 08/03/10 19-20	SB-77 INVE 08/03/10 24-25
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway										
<u>Metals (mg/kg)</u>														
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.54 U	0.51 U	0.43 U	0.5 U	-	-	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	5.2	5.2	3.3	4.9	4.3	4.2	4.3 J	5.1
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	130	51.6	61.4	136	-	-	-	-
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.7 J	0.28 J	0.28 J	0.62 J	-	-	-	-
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.47 J	4.1	3.5	0.84 J	-	-	-	-
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (I)	5,200	114,000	51,200	20,300	-	-	-	-
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	21	35.1	34.6	25.9	-	-	-	-
Lead	80	NS/14	50	GWP	NS/14	13.59	10.7	4.7	6.5	11.6	-	-	-	-
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	5,080	13,200	10,500	4,890	-	-	-	-
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	20.5	23.8	18	17.5	-	-	-	-
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (I)	2,340 J	1,310 J	1,580 J	3,120	-	-	-	-
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	1.1 U	1.8 J	0.89 J	1 U	-	-	-	-
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (I)	385 J	190 U	221 J	269 J	-	-	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	1.1 U	0.1 U	0.085 U	0.1 U	-	-	-	-
Vanadium	520	78/NS	NS	NS	78/NS	22.68	30.1	45.5	41.3	33.9	-	-	-	-
<u>Wet Chemistry (mg/kg)</u>														
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	18.2	22.4	24.9	73.8	30.4	9.4	10.5	1.8
Fluoride	4,100	NS	7.4	GWP	3.95	7	1.4	3.0	4.7	5.7	-	-	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	5.4	2.0	0.54 U	1.5	-	-	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	187	369	766	1,170	-	-	-	-
Total Phosphorus	NS	NS	NS	NS	NS	NS	274	1,060	1,460	2,140	-	-	-	-
pH	NS	NS	NS	NS	NS	NS	5.96	7.13	7.44	7.77	-	-	-	-
<u>Radiological (pCi/g)</u>														
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	11	-	-	-	-	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	6.6	-	-	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	2.57	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	0.7 U	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathw

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated ;

Table D-10

Soil Sampling Analytical Results - 2010 Production Well NW-9 QC Lab Leach Field
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-76	SB-77	SB-77	SB-77	SB-77	SB-77	SB-77	SB-77
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10	08/03/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	21.5-22.5	0-1	1-2	4-5	9-10	14-15	19-20	24-25

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluori

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

c/ US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/ Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the huma

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimur

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cui

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cui

Table D-11

Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-78 INVE 08/11/10 0-1	SB-78 DUP 08/11/10 0-1	SB-78 INVE 08/11/10 1-2	SB-78 INVE 08/11/10 4-5	SB-78 INVE 08/11/10 9-10	SB-78 INVE 08/11/10 14-15	SB-78 INVE 08/11/10 19-20	SB-79 INVE 08/11/10 0-1	SB-79 INVE 08/11/10 1-2	SB-79 INVE 08/11/10 4-5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway												
<u>Metals (mg/kg)</u>																
Antimony	99,000	0.27/0.27	4.8	GWP	0.27/0.27	0.50	0.41 U	0.12	0.3 J	0.4 J	-	-	-	0.99 U	1.1 U	0.36 J
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	0.0013/0.29	4.7	2.8	2.7	1.4	0.33 J	-	-	-	4.4 J	3.7 J	0.39 J
Barium	1.6	1,200/82	896	GWP	1,200/82	170.2	130	133	82.1	188	-	-	-	120	170	76.3
Beryllium	19,000	13/3.2	1.63	GWP	13/3.2	0.89	0.57 J	0.66	0.25	0.14 J	-	-	-	0.85 J	0.86 J	0.13 J
Cadmium	200	NS/NS	1.4	GWP	NS/NS	0.869	0.53 J	0.52	4	0.072 J	-	-	-	1 J	0.76 J	0.27
Calcium	80	NS/NS	NS	NS	NS/NS	38,270 (l)	38,300	42,700	165,000	394,000	-	-	-	31,600	37,800	202,000
Chromium	(j)	NS/180,000	2,135	GWP	NS/180,000	18.61	13.9	15.5	20.1	1.3 J	-	-	-	24.8	25.7	2.2 J
Lead	80	NS/14	50	GWP	NS/14	13.59	7.8	9.3	8	0.58 J	-	-	-	10	12.5	0.87 J
Magnesium	(j)	NS/NS	NS	NS	NS/NS	7,146	6,390	7,260	-	4,530	-	-	-	10,300	7,230	2,220
Nickel	2,000	20/NS	59	GWP	20/NS	15.71	12.6	14.6	8.5	0.93 J	-	-	-	20.7	18.3	2.6
Potassium	(j)	NS/NS	NS	NS	NS/NS	3,393 (l)	2,010 J	2,000	1,330	144 J	-	-	-	2,370 J	2,970 J	337 J
Selenium	510	0.4/0.26	2.0	GWP	0.4/0.26	1.04	0.82 U	0.21 U	1.5 U	4.5 U	-	-	-	2 U	2.2 U	2.1 U
Sodium	(j)	NS/NS	NS	NS	NS/NS	289 (l)	150 U	160 U	59.7 J	113 J	-	-	-	370 U	410 U	39 U
Thallium	1	0.0011/0.14	1.6	GWP	0.0011/0.14	NS	0.082 U	0.11 U	0.29 U	0.45 U	-	-	-	0.099 U	0.11 U	0.1 U
Vanadium	520	78/NS	NS	NS	78/NS	22.68	18.6	20.4	15.3	1 J	-	-	-	26.7	29.1	2.5 J
<u>Wet Chemistry (mg/kg)</u>																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	NS	NS	21.8	24.7	84.5	6.5	2.5	6.8	1.6	8.9	46.4	50.5
Fluoride	4,100	NS	7.4	GWP	3.95	7	2.4	0.54	7	5.4	-	-	-	3.8	1.4	0.6 U
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1.9	2.7	4.2	7.3	-	-	-	0.52 U	2.0	3.3
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	825	446	2,710	301	-	-	-	355	991	1,440
Total Phosphorus	NS	NS	NS	NS	NS	NS	1,030	2,520	374	104	-	-	-	109	429	484
pH	NS	NS	NS	NS	NS	NS	8.02	7.83	7.3	8.03	-	-	-	7.78	7.66	7.62
<u>Radiological (pCi/g)</u>																
Gross alpha	NS	NS	NS	NS	NS	NS	-	-	4.7	-	-	-	-	-	4.4	-
Gross beta	NS	NS	NS	NS	NS	NS	-	-	6.3	-	-	-	-	-	3.7	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	NS	5 ^(surface) , 15 ^(subsurface)	-	-	2.55	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	NS	15	-	-	0.91	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised

Table D-11

Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department				SB-78	SB-78	SB-78	SB-78	SB-78	SB-78	SB-78	SB-79	SB-79	SB-79
Sample Type:	Protection of		of Environmental Quality ^(b)		Background		INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	Concentrations	Comparative	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	(UTL 95-95) ^(f)	Values ^(g)	0-1	0-1	1-2	4-5	9-10	14-15	19-20	0-1	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

c/ Surface soil.

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

Table D-11

Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Industrial Soil (mg/kg)	Groundwater ^(e) Risk-Based/MCL-Based Risk-Based/MCL-Based IDTLs (mg/kg)	Idaho Department of Environmental Quality ^(b) Risk Based Critical Pathway	SB-79 INVE 08/11/10 9-10	SB-79 INVE 08/11/10 14-15	SB-79 INVE 08/11/10 16-17	SB-80 INVE 08/11/10 0-1	SB-80 INVE 08/11/10 1-2	SB-80 INVE 08/11/10 4-5	SB-80 INVE 08/11/10 9-10	SB-80 INVE 08/11/10 13-14	SB-81 INVE 08/11/10 0-1	SB-81 INVE 08/11/10 1-2	SB-81 INVE 08/11/10 4-5	SB-81 INVE 08/11/10 9-10	SB-81 INVE 08/11/10 14-15
Metals (mg/kg)																
Antimony	99,000	0.27/0.27	4.8	GWP	-	-	-	0.87 U	0.44 U	0.47 J	-	-	0.15 J	0.14 J	0.12 J	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	-	-	-	4 J	3	1.7	4.7	2.3	1.7	1.2	1	2.1 J
Barium	1.6	1,200/82	896	GWP	-	-	-	129	118	128	-	-	91.7	81.2	84.8	-
Beryllium	19,000	13/3.2	1.63	GWP	-	-	-	0.86 J	0.58 J	0.31	-	-	0.54	0.46	0.5 J	-
Cadmium	200	NS/NS	1.4	GWP	-	-	-	1 J	0.43 J	3.3	0.071 J	0.051 U	0.59	0.3	0.28	-
Calcium	80	NS/NS	NS	NS	-	-	-	41,900	9,370	245,000	-	-	38,200	106,000	49,400	-
Chromium	(j)	NS/180,000	2,135	GWP	-	-	-	20.7	15.8	11.1	-	-	10.9	15.20	12.8	-
Lead	80	NS/14	50	GWP	-	-	-	10	8.7	3.8	-	-	7.2	6.6	6.6	-
Magnesium	(j)	NS/NS	NS	NS	-	-	-	11,200	4,000	3,920	-	-	2,890	3,130	6,900	-
Nickel	2,000	20/NS	59	GWP	-	-	-	16.8	13.4	6.1 J	-	-	9.9	8.7	9.1	-
Potassium	(j)	NS/NS	NS	NS	-	-	-	2,410 J	2,080 J	1,450	-	-	2,660	1,460	1,080 J	-
Selenium	510	0.4/0.26	2.0	GWP	-	-	-	1.7 U	0.88 U	3.5 U	-	-	7.9	1.5 U	0.6 U	-
Sodium	(j)	NS/NS	NS	NS	-	-	-	330 U	170 U	94.7 J	-	-	59 U	50.2 J	110 U	-
Thallium	1	0.0011/0.14	1.6	GWP	-	-	-	0.087 U	0.088 U	0.35 U	-	-	0.078 U	0.076 U	0.076 U	-
Vanadium	520	78/NS	NS	NS	-	-	-	23.2	18.7	11.4	-	-	12.6	8.4	11.1	-
Wet Chemistry (mg/kg)																
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	4	2.7	3.1	23.3	40.8	53.7	0.88 J	0.66 J	76	49.8	10	13.9
Fluoride	4,100	NS	7.4	GWP	-	-	-	3.1	1.1	10.8	0.93 J	0.86 J	19.2	4.3	1.6	-
Nitrate as N	1,600,000	NS	18.4	GWP	-	-	-	4.3	2.1	4.7	-	-	2.9	2.1	2	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	-	-	-	628	969	1,950	-	-	1,850	1,090	329	-
Total Phosphorus	NS	NS	NS	NS	-	-	-	545	804	641	-	-	585	1,100	301	-
pH	NS	NS	NS	NS	-	-	-	7.86	7.82	7.65	-	-	7.16	7.92	8.11	-
Radiological (pCi/g)																
Gross alpha	NS	NS	NS	NS	-	-	-	-	6.1	-	-	-	-	4.0	-	-
Gross beta	NS	NS	NS	NS	-	-	-	-	4.6	-	-	-	-	4.0	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	-	-	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL base
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicat
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = t
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As upd
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and W
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As upc
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Wate

Table D-11

Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department		SB-79	SB-79	SB-79	SB-80	SB-80	SB-80	SB-80	SB-80	SB-81	SB-81	SB-81	SB-81	SB-81
Sample Type:	Protection of		of Environmental Quality ^(b)		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	9-10	14-15	16-17	0-1	1-2	4-5	9-10	13-14	0-1	1-2	4-5	9-10	14-15

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measuremen

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to pr

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

c/ Surface soil.

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

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i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

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k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified a

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium cal

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The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published sc

Table D-11

Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Leve Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		SB-81 INVE 08/11/10 19-20	SB-81 INVE 08/11/10 22-23	SB-82 INVE 08/11/10 0-1	SB-82 INVE 08/11/10 1-2	SB-82 DUP 08/11/10 1-2	SB-82 INVE 08/11/10 4-5	SB-82 INVE 08/11/10 9-10	SB-82 INVE 08/11/10 14-15	SB-82 INVE 08/11/10 19-20	SB-83 INVE 08/11/10 0-1	SB-83 INVE 08/11/10 1-2	SB-83 INVE 08/11/10 4-5	SB-83 INVE 08/11/10 5-6
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway													
Metals (mg/kg)																	
Antimony	99,000	0.27/0.27	4.8	GWP	-	-	1.6 U	1.8 U	2 U	0.64 J	-	-	-	0.95 U	2 U	0.37 J	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	3.6	6.7	3.3 J	3.9 J	4.4	0.76	0.72	0.94	3.7	10.7	9 J	1.4 J	2.7
Barium	1.6	1,200/82	896	GWP	-	-	64.9	60.8 J	56.5	115	-	-	-	170	71 J	82.7	-
Beryllium	19,000	13/3.2	1.63	GWP	-	-	1.6 J	0.92 U	1 U	1.5	-	-	-	0.72 J	1 U	0.13 J	-
Cadmium	200	NS/NS	1.4	GWP	-	-	13.3	16.3	12.2	1.1	-	-	-	5.1	102	0.22	-
Calcium	80	NS/NS	NS	NS	-	-	183,000	141,000	175,000	329,000	-	-	-	213,000	162,000	284,000	-
Chromium	(j)	NS/180,000	2,135	GWP	-	-	70.2	117	70.7	11	-	-	-	31.2	211	1.4 J	-
Lead	80	NS/14	50	GWP	-	-	5.8 J	6.1	8.1	1.1 J	-	-	-	7.4 J	6.4	0.35 J	-
Magnesium	(j)	NS/NS	NS	NS	-	-	1,920 J	1,360 J	979	2,940	-	-	-	5,080	2,120 J	2,550	-
Nickel	2,000	20/NS	59	GWP	-	-	12 J	20.6	13.1	6.1 J	-	-	-	17.1 J	56.2	0.68 J	-
Potassium	(j)	NS/NS	NS	NS	-	-	1,120 J	820 J	693	474 J	-	-	-	2,510 J	1,990 J	401 J	-
Selenium	510	0.4/0.26	2.0	GWP	-	-	8.4 J	6.4 J	4.9	3.9 U	-	-	-	1.9 U	8.4 J	3.3 U	-
Sodium	(j)	NS/NS	NS	NS	-	-	1,200 U	690 U	760 U	104 J	-	-	-	647 J	1,140 J	405 J	-
Thallium	1	0.0011/0.14	1.6	GWP	-	-	1.6 U	0.092 U	2 U	0.39 U	-	-	-	0.95 U	0.82	0.33 U	-
Vanadium	520	78/NS	NS	NS	-	-	74.4	132	75	11.9	-	-	-	56.5	302	1.4 J	-
Wet Chemistry (mg/kg)																	
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	2.4	1.3 J	17.3	13.7	17.7	19.1	6.7	94	125	135	161	82.3	58.9
Fluoride	4,100	NS	7.4	GWP	-	-	45.9	42.7	42.7	3.2	-	-	-	25.1	9.2	0.93 J	-
Nitrate as N	1,600,000	NS	18.4	GWP	-	-	0.53 U	11.2	0.53 U	20.3	22.1	1.6	0.59 U	0.55 U	0.58 U	0.58 U	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	-	-	343	611	338	367	-	-	-	851	911	454	-
Total Phosphorus	NS	NS	NS	NS	-	-	2,390	1,330	3,280	617	-	-	-	852	6,350	468	-
pH	NS	NS	NS	NS	-	-	6.95	6.17	6.7	7.4	-	-	-	7.35	5.45	8.06	-
Radiological (pCi/g)																	
Gross alpha	NS	NS	NS	NS	-	-	-	67	-	-	-	-	-	-	15.3	-	-
Gross beta	NS	NS	NS	NS	-	-	-	26.8	-	-	-	-	-	-	9.6	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	-	-	-	15.6	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	-	-	-	0.3 U	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

NS = No regulatory criteria established.

GWP = Groundwater protection.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL base
"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicat
GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit
IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = t
"NS" = not applicable or standard not developed; SSLs = soil screening levels
UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As upd
SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and W
EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As upc
EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Wate

Table D-11

Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department		SB-81	SB-81	SB-82	SB-82	SB-82	SB-82	SB-82	SB-82	SB-83	SB-83	SB-83	SB-83
Sample Type:	Protection of		of Environmental Quality ^(b)		INVE	INVE	INVE	INVE	DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	19-20	22-23	0-1	1-2	1-2	4-5	9-10	14-15	19-20	0-1	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurerr

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to pr

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

c/ Surface soil.

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/Comparative values are defined as:

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i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compi

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified a

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Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Levels Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		SB-84 INVE 08/11/10 0-1	SB-84 INVE 08/11/10 1-2	SB-84 INVE 08/11/10 4-5	SB-84 INVE 08/11/10 9-10	SB-85 INVE 08/11/10 0-1	SB-85 INVE 08/11/10 1-2	SB-85 INVE 08/11/10 4-5	SB-85 INVE 08/11/10 8-9	SB-86 INVE 08/12/10 0-1	SB-86 DUP 08/12/10 0-1	SB-86 INVE 08/12/10 1-2	SB-86 DUP 08/12/10 1-2	SB-86 INVE 08/12/10 4-5
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway													
Metals (mg/kg)																	
Antimony	99,000	0.27/0.27	4.8	GWP	0.81 U	0.98 U	0.95 U	-	0.79 U	0.94 U	0.47 J	-	2.8 U	0.98 U	1.8 U	1.1 U	2 U
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	3.9 J	3.3 J	5.9	4.9	3.6 J	7.1	4.4	1.3	5.1 J	5.1	6.6 J	6.1	5 J
Barium	1.6	1,200/82	896	GWP	160	140	133	-	132	264	150	-	152 J	144	192	181	308
Beryllium	19,000	13/3.2	1.63	GWP	1 J	1 J	0.67 J	-	0.77 J	1.8 J	1.6	0.13 J	1.4 U	0.73	0.9 U	0.57 U	0.98 U
Cadmium	200	NS/NS	1.4	GWP	1.2 J	0.96 J	0.66 J	-	1.3 J	7.9	1.3	-	4 J	1.6	7.5	7.8	11.4
Calcium	80	NS/NS	NS	NS	7,110	6,620	68,500	-	6,140	107,000	241,000	-	6,270 J	8,320	5,810	6,120	19,600
Chromium	(j)	NS/180,000	2,135	GWP	22	24.2	20.2	-	22.9	45.5	28	-	44.3	26.9	69.1	53.8	87.2
Lead	80	NS/14	50	GWP	11	11.4	7.8	-	19.9	10.4	3.3	-	12	11.5	11.9	12.3	10.2
Magnesium	(j)	NS/NS	NS	NS	5,020	5,290	5,360	-	3,870	4,750	2,110	-	3,200 J	3,910	2,560 J	2,790	4,070 J
Nickel	2,000	20/NS	59	GWP	17.6	17.5	14.1	-	15.3	21	13.6	-	12	14.7	11.1	13	13
Potassium	(j)	NS/NS	NS	NS	4,650	3,960 J	2,130 J	-	3,480 J	4,720	916	-	4,350 J	3,740	4,960 J	4,760	9,100 J
Selenium	510	0.4/0.26	2.0	GWP	1.6 U	2 U	1.9 U	-	1.6 U	1.9 U	3.4 U	-	5.6 U	2 U	3.6 U	2.3 U	3.9 U
Sodium	(j)	NS/NS	NS	NS	300 U	370 U	418 J	-	300 U	350 U	32 U	-	1,000 U	370 U	670 U	747	3,890 J
Thallium	1	0.0011/0.14	1.6	GWP	0.081 U	0.098 U	0.095 U	-	0.079 U	0.094 U	0.17 U	-	0.25 J	0.098 U	0.56	0.34	0.098 U
Vanadium	520	78/NS	NS	NS	25.2	25.5	31.8	-	24.6	61.6	11.6	-	48.1 J	32.3	70	66.5	134
Wet Chemistry (mg/kg)																	
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	70.9	52	8.2	3.8	61.3	79.6	37	1.4	98.2	71.5	216	270	616
Fluoride	4,100	NS	7.4	GWP	5	5.6	7	-	50.5	30.1	1.3	-	436	136	1,310	1,330	2,370
Nitrate as N	1,600,000	NS	18.4	GWP	26.5	25.2	21.3	11.9	2.2	5.7	5.1	-	0.54 U	2.4	0.58 U	5.5	0.58 U
Total Kjeldahl Nitrogen	NS	NS	NS	NS	1,860	1,920	281	-	1,500	2,280	1,210	-	1,010	1,500	848	1010	1,040
Total Phosphorus	NS	NS	NS	NS	1,350	663	543	-	290	290	320	-	3,150	582	8,350	2,940	2,880
pH	NS	NS	NS	NS	7.04	7.12	7.86	-	7.26	7.47	7.83	-	5.32	6.38	4.77	4.78	4.53
Radiological (pCi/g)																	
Gross alpha	NS	NS	NS	NS	-	5.7	-	-	-	8.7	-	-	-	-	15.4	13.8	-
Gross beta	NS	NS	NS	NS	-	5.6	-	-	-	7.5	-	-	-	-	14.2	15.8	-
Radium 226	5 ^(surface) , 15 ^(subsurface)				-	-	-	-	-	-	-	-	-	-	1.83	1.47	-
Radium 228	15	NS	NS	NS	-	-	-	-	-	-	-	-	-	-	0.92	1.28	-

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Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department		SB-84	SB-84	SB-84	SB-84	SB-85	SB-85	SB-85	SB-85	SB-86	SB-86	SB-86	SB-86	SB-86
Sample Type:	Protection of		of Environmental Quality ^(b)		INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	DUP	INVE	DUP	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/11/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	0-1	1-2	4-5	9-10	0-1	1-2	4-5	8-9	0-1	0-1	1-2	1-2	4-5

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurerr

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

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US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

c/ Surface soil.

d/ Idaho Risk Reduction Manual, July 2004.

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Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sample Type: Sampling Date: Depth:	Region 9 Regional Screening Levels Protection of Groundwater ^(e)		Idaho Department of Environmental Quality ^(b)		SB-86 DUP 08/12/10 4-5	SB-86 INVE 08/12/10 9-10	SB-86 INVE 08/12/10 14-15	SB-86 INVE 08/12/10 18-19	SB-87 INVE 08/12/10 0-1	SB-87 INVE 08/12/10 1-2	SB-87 INVE 08/12/10 4-5	SB-87 INVE 08/12/10 9-10	SB-87 INVE 08/12/10 10-11
	Industrial Soil (mg/kg)	Risk-Based/MCL-Based	Risk Based IDTLs (mg/kg)	Critical Pathway									
Metals (mg/kg)													
Antimony	99,000	0.27/0.27	4.8	GWP	1.8 U	-	-	-	0.81 U	0.095 U	0.54 U	-	-
Arsenic	41	0.0013/0.29	0.39	Surficial Soil	5.9	4.6	3.9	2.9	2.4 J	2.2	5	3.9	4.9
Barium	1.6	1,200/82	896	GWP	289	199	110	74.6	121	107	111	-	-
Beryllium	19,000	13/3.2	1.63	GWP	0.89 U	-	-	-	0.71 J	0.58 J	0.75 J	-	-
Cadmium	200	NS/NS	1.4	GWP	13.9	-	-	-	1.7	0.35	0.63 J	-	-
Calcium	80	NS/NS	NS	NS	14,900	-	-	-	77,700	90,200	43,200	-	-
Chromium	(j)	NS/180,000	2,135	GWP	85.3	-	-	-	22.5	14.4	18.4	-	-
Lead	80	NS/14	50	GWP	10.4	-	-	-	8.7	7.6	9.2	-	-
Magnesium	(j)	NS/NS	NS	NS	3,170	-	-	-	5,340	7,220	9,270	-	-
Nickel	2,000	20/NS	59	GWP	15.4	-	-	-	11.5	9.9	12.5	-	-
Potassium	(j)	NS/NS	NS	NS	7,820	-	-	-	2,950 J	1,650 J	1,810 J	-	-
Selenium	510	0.4/0.26	2.0	GWP	3.6 U	-	-	-	1.6 U	0.95 U	1.1 U	-	-
Sodium	(j)	NS/NS	NS	NS	2,310	-	-	-	300 U	140 U	200 U	-	-
Thallium	1	0.0011/0.14	1.6	GWP	0.089 U	-	-	-	0.081 U	0.095 U	0.11 U	-	-
Vanadium	520	78/NS	NS	NS	109	-	-	-	28.4	19.7	28.3	-	-
Wet Chemistry (mg/kg)													
Ammonia (as N)	NS	NS	4.1	Subsurface Soil	416	9.7	7.3	2.8	55.7	37	8.3	3.4	3.4
Fluoride	4,100	NS	7.4	GWP	2,280	8.5	1.3	1.6	48.6	58.9	2.7	-	-
Nitrate as N	1,600,000	NS	18.4	GWP	0.58 U	-	-	-	15.6	2.2	2.2	-	-
Total Kjeldahl Nitrogen	NS	NS	NS	NS	1,150	-	-	-	1,790	1,210	279	-	-
Total Phosphorus	NS	NS	NS	NS	2,660	-	-	-	4,070	4,070	1,170	-	-
pH	NS	NS	NS	NS	4.51	-	-	-	7.57	7.78	7.93	-	-
Radiological (pCi/g)													
Gross alpha	NS	NS	NS	NS	-	-	-	-	-	3.8	-	-	-
Gross beta	NS	NS	NS	NS	-	-	-	-	-	3.9	-	-	-
Radium 226	5 ^(surface) , 15 ^(subsurface)	NS	NS	NS	-	-	-	-	-	-	-	-	-
Radium 228	15	NS	NS	NS	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

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Soil Sampling Analytical Results - 2010 Gypstack Area
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	Region 9 Regional Screening Leve		Idaho Department		SB-86	SB-86	SB-86	SB-86	SB-87	SB-87	SB-87	SB-87	SB-87
Sample Type:	Protection of		of Environmental Quality ^(b)		DUP	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE
Sampling Date:	Industrial	Groundwater ^(e)	Risk Based	Critical	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10	08/12/10
Depth:	Soil (mg/kg)	Risk-Based/MCL-Based	IDTLs (mg/kg)	Pathway	4-5	9-10	14-15	18-19	0-1	1-2	4-5	9-10	10-11

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurerr

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to pr

Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

c/ Surface soil.

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

h/ provided by Accutest Laboratories.

i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.

j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compi

k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified a

l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium cal

m/ Radiochemistry labs do not use method detection limts and reporting limits that conventional labs use. Rai

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published sc

Table D-12

Soil Sampling Analytical Results - 2010 Trip and Equipment Blanks
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	EB08041	EB08051	EB08061	EB08091	EB08101	EB08111	EB08121	EB08131	EB08161	EB08171	EB08181	TB08041	TB08051	TB08061
Sample Type:	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	INVE	TB	TB	TB
Sampling Date:	8/4/2010	8/5/2010	8/6/2010	8/9/2010	8/10/2010	8/11/2010	8/12/2010	8/13/2010	8/16/2010	8/17/2010	8/18/2010	8/4/2010	8/5/2010	8/6/2010
Depth (feet):	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Volatile Organic Compounds (mg/l)</u>														
Benzene	0.00021 U	0.00021 U	0.00021 U	-	-	-	-	-	-	-	-	0.00021 U	0.001 U	0.00021 U
Ethylbenzene	0.0002 U	0.0002 U	0.0002 U	-	-	-	-	-	-	-	-	0.0002 U	0.0011 U	0.0002 U
Toluene	0.0002 U	0.0002 U	0.0002 U	-	-	-	-	-	-	-	-	0.0002 U	0.0012 U	0.0002 U
TPH-GRO (C6-C10)	0.05 U	0.05 U	0.05 U	-	-	-	-	-	-	-	-	-	-	-
Xylene, (total)	0.00054 U	0.00054 U	0.00054 U	-	-	-	-	-	-	-	-	0.00054 U	0.0022 U	0.00054 U
<u>Metals (mg/l)</u>														
Antimony	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0023	0.0021	0.002 U	-	-	-
Arsenic	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	-	-	-
Barium	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	-	-	-
Beryllium	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	-	-	-
Cadmium	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	-	-	-
Calcium	0.103	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.633	0.1 U	0.104	0.627	-	-	-
Chromium	0.001 U	0.001 U	0.0047	0.001 U	0.001 U	0.001 U	0.0064	0.001 U	0.001 U	0.001 U	0.0055	-	-	-
Lead	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	-	-	-
Magnesium	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-
Nickel	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	-	-	-
Potassium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	-	-
Selenium	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0024	0.0022	0.002 U	-	-	-
Sodium	0.75 U	0.75 U	0.75 U	0.75 U	1	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	1.43	-	-	-
Thallium	0.0018	0.0019	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0015 U	0.0018	0.0015 U	0.0015 U	0.0015 U	-	-	-
Vanadium	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	-	-	-
<u>Wet Chemistry (mg/l)</u>														
Ammonia (as N)	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	-	-	-
Fluoride	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	-	-	-
Nitrate as N	0.05 U	0.05 U	0.12	0.05 U	0.11	0.15	0.05 U	0.05 U	0.11	0.05 U	0.1	-	-	-
Total Kjeldahl Nitrogen	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	0.22	0.49	0.38	0.14	0.11 U	-	-	-
Total Phosphorus	0.027	0.009	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	0.009 U	-	-	-
pH	4.75	7.6	7.79	7.48	7.3	3.87	6.11	7.23	6.7	6.56	6.56	-	-	-
<u>Radiological (pCi/l)</u>														
Gross alpha	-	-	-	-	-	-	-	-	0.22 U	1 U	-	-	-	-
Gross beta	-	-	-	-	-	-	-	-	0.9 U	1.7 U	-	-	-	-
Radium 226	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radium 228	-	-	-	-	-	-	-	-	-	-	-	-	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.

DUP = Blind duplicate.

MS = Matrix spike.

Bold = Above criteria

Table D-13

Soil Sample Summary - 2012
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and		Sample Information						Chemical Parameters			Sample Type (INVE/DUP)	Additional Comments
		Soil Boring	Sample ID	Depths	Date	Time	Metals ^(a)	pH	General Chemistry ^(b)	Rad Chem ^(c) Gross a & B		
Phosphoric and Super Phosphoric Acid Area												
North Car Wash Sump Area												
SB-88	SB-88 (0-1)	0-1	09/11/12	810	X	X	X	X	X	X	INVE	Refusal at 11 feet bgs (not bedrock).
	SB-88 (1-2)	1-2	09/11/12	815	X	X	X	X	X	X	INVE	
	SB-88 (4-5)	4-5	09/11/12	820	X	X	X	X	X	X	INVE	
	SB-88 (9-10)	9-10	09/11/12	840	X	X	X	X	X	X	INVE	
SB-89	SB-89 (0-1)	0-1	09/11/12	1530	X	X	X	X	X	X	INVE	Hand auger refusal at 1 feet bgs on gravel, 4 attempts
SB-90	SB-90 (0-1)	0-1	09/11/12	1245	X	X	X	X	X	X	INVE	Refusal at 15 feet bgs (not bedrock).
	SB-90 (1-2)	1-2	09/11/12	1250	X	X	X	X	X	X	INVE	
	SB-90 (4-5)	4-5	09/11/12	1255	X	X	X	X	X	X	INVE	
	SB-90 (9-10)	9-10	09/11/12	1300	X	X	X	X	X	X	INVE	
	SB-90 (14-15)	14-15	09/11/12	1310	X	X	X	X	X	X	INVE	
SB-91	SB-91 (0-1)	0-1	09/11/12	1320	X	X	X	X	X	X	INVE	Refusal at 15 feet bgs (not bedrock).
	SB-91 (1-2)	1-2	09/11/12	1325	X	X	X	X	X	X	INVE	
	SB-91 (4-5)	4-5	09/11/12	1330	X	X	X	X	X	X	INVE	
	SB-91 (9-10)	9-10	09/11/12	1335	X	X	X	X	X	X	INVE	
	SB-91 (14-15)	14-15	09/11/12	1345	X	X	X	X	X	X	INVE	
SB-92	SB-92 (0-1)	0-1	09/11/12	1040	X	X	X	X	X	X	INVE	Refusal at 25 feet bgs in basalt.
	SB-92 (1-2)	1-2	09/11/12	1045	X	X	X	X	X	X	INVE	
	SB-92 (4-5)	4-5	09/11/12	1050	X	X	X	X	X	X	INVE	
	SB-92 (9-10)	9-10	09/11/12	1055	X	X	X	X	X	X	INVE	
	SB-92 (14-15)	14-15	09/11/12	1110	X	X	X	X	X	X	INVE	
	SB-92 (19-20)	19-20	09/11/12	1115	X	X	X	X	X	X	INVE	
	SB-92 (24-25)	24-25	09/11/12	1120	X	X	X	X	X	X	INVE	
SB-93	SB-93 (0-1)	0-1	09/11/12	910	X	X	X	X	X	X	INVE	Refusal at 22 feet bgs in basalt; moist at 22 feet bgs
	SB-93 (1-2)	1-2	09/11/12	915	X	X	X	X	X	X	INVE	
	SB-93 (4-5)	4-5	09/11/12	925	X	X	X	X	X	X	INVE	
	SB-93 (9-10)	9-10	09/11/12	935	X	X	X	X	X	X	INVE	
	SB-93 (14-15)	14-15	09/11/12	1010	X	X	X	X	X	X	INVE	
	SB-93 (19-20)	19-20	09/11/12	1020	X	X	X	X	X	X	INVE	
SB-94	SB-94 (0-1)	0-1	09/11/12	1150	X	X	X	X	X	X	INVE	Duplicate sample of SB-94 (9-10) Refusal at 22 feet bgs in basalt; moist at 22 feet bgs.
	SB-94 (1-2)	1-2	09/11/12	1155	X	X	X	X	X	X	INVE	
	SB-94 (4-5)	4-5	09/11/12	1205	X	X	X	X	X	X	INVE	
	SB-94 (9-10)	9-10	09/11/12	1210	X	X	X	X	X	X	INVE	
	SB-94D (9-10)	9-10	09/11/12	1215	X	X	X	X	X	X	DUP	
	SB-94 (14-15)	14-15	09/11/12	1220	X	X	X	X	X	X	INVE	
	SB-94 (19-20)	19-20	09/11/12	1230	X	X	X	X	X	X	INVE	

Table D-13

Soil Sample Summary - 2012
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Areas of Interest and		Sample Information						Chemical Parameters			Sample Type (INVE/DUP)	Additional Comments
Soil Boring	Sample ID	Depths	Date	Time	Metals ^(a)	pH	General Chemistry ^(b)	Rad Chem ^(c) Gross a & B	Ra-226/228			
Phosphoric and Super Phosphoric Acid Area												
South Car Wash Sump Area												
SB-95	SB-95 (0-1)	0-1	9/10/2012	1445	X	X	X	X	X	INVE	Hand auger refusal at 3 feet bgs on gravel	
	SB-95 (1-2)	1-2	9/10/2012	1455	X	X	X	X	X	INVE		
SB-96	SB-96 (0-1)	0-1	9/10/2012	1350	X	X	X	X	X	INVE	Duplicate sample of SB-96 (0-1) Duplicate sample of SB-96 (1-2) Refusal at 18 feet bgs.	
	SB-96D (0-1)	0-1	9/10/2012	1352	X	X	X	X	X	DUP		
	SB-96 (1-2)	1-2	9/10/2012	1355	X	X	X	X	X	INVE		
	SB-96D (1-2)	1-2	9/10/2012	1400	X	X	X	X	X	DUP		
	SB-96 (4-5)	4-5	9/10/2012	1410	X	X	X	X	X	INVE		
SB-97	SB-97 (0-1)	0-1	09/11/12	1615	X	X	X	X	X	INVE	Borehole abandoned at 5 feet bgs.	
	SB-97 (1-2)	1-2	09/11/12	1620	X	X	X	X	X	INVE		
	SB-97 (4-5)	4-5	09/11/12	1625	X	X	X	X	X	INVE		
SB-98	SB-98 (0-1)	0-1	09/11/12	1640	X	X	X	X	X	INVE	Borehole abandoned at 5 feet bgs.	
	SB-98 (1-2)	1-2	09/11/12	1645	X	X	X	X	X	INVE		
	SB-98 (4-5)	4-5	09/11/12	1650	X	X	X	X	X	INVE		
SB-99	SB-99 (0-1)	0-1	09/11/12	1515	X	X	X	X	X	INVE	Refusal at 9 feet bgs (not bedrock).	
	SB-99 (1-2)	1-2	09/11/12	1520	X	X	X	X	X	INVE		
	SB-99 (4-5)	4-5	09/11/12	1530	X	X	X	X	X	INVE		
	SB-99 (8-9)	8-9	09/11/12	1535	X	X	X	X	X	INVE		
SB-100	SB-100 (0-1)	0-1	09/11/12	1550	X	X	X	X	X	INVE	Refusal at 9 feet bgs (not bedrock).	
	SB-100 (1-2)	1-2	09/11/12	1555	X	X	X	X	X	INVE		
	SB-100 (4-5)	4-5	09/11/12	1600	X	X	X	X	X	INVE		
	SB-100 (8-9)	8-9	09/11/12	1605	X	X	X	X	X	INVE		
SB-101	SB-101 (0-1)	0-1	09/11/12	1440	X	X	X	X	X	INVE	Duplicate sample of SB-101 (9-10) Refusal at 10 feet bgs (not bedrock).	
	SB-101 (1-2)	1-2	09/11/12	1445	X	X	X	X	X	INVE		
	SB-101 (4-5)	4-5	09/11/12	1450	X	X	X	X	X	INVE		
	SB-101 (9-10)	9-10	09/11/12	1455	X	X	X	X	X	INVE		
	SB-101D (9-10)	9-10	09/11/12	1500	X	X	X	X	X	DUP		
Additional QC Samples												
Equipment Blanks	EB0911A12	-	9/11/2012	1710	X	X	X	X	X	INVE	Collected from Geoprobe cutting shoe,deconned 9/10/2012	
	EB0911B12	-	9/11/2012	1715	X	X	X	X	X	INVE	Collected from Geoprobe cutting shoe,deconned 9/11/2012	

a/ Metals include list presented in Table 3.

b/ General chemistry parameters include pH, total phosphorus, nitrate, Total Kjeldahl Nitrogen, ammonia, and fluoride.

c/ Radiological analysis

Bold = Above criteria

Table D-14

Soil Sampling Analytical Results - 2012 North and South Car Wash Sump Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sampling Date: Depth:	EPA Region 9 Regional Screening Levels ^(c)		Idaho Department of Environmental Quality ^(d)				Background Concentrations (UTL 95-95) ^(f)	Comparative Values ^(g)	SB-88 09/11/12 0-1	SB-88 09/11/12 1-2	SB-88 09/11/12 4-5	SB-88 09/11/12 9-10	SB-89 09/10/12 0-1	SB-90 09/11/12 0-1	SB-90 09/11/12 1-2	SB-90 09/11/12 4-5	SB-90 09/11/12 9-10	SB-90 09/11/12 14-15	SB-91 09/11/12 0-1	
	Industrial	Protection of Groundwater ^(e)	Risk Based	Critical																
	Soil (mg/kg)	Risk-Based/MCL-Base	IDTLs (mg/kg)	Pathway																
Metals (mg/kg)																				
Aluminum	99,000	23,000/NS	- (g)	NS	15,041	23,000	16,900	31,300	16,400	32,800	12,700	13,400	19,700	17,300	13,200	20,000	24,000			
Antimony	41	0.27/0.27	4.8	GWP	0.50	0.50	4.7 J	5.9	2.6 J	1.9 J	2.6 J	1.8 U	5.3 J	0.83 J	0.39 U	0.56 U	2.7 J			
Arsenic	1.6	0.0013/0.29	0.39	Surficial Soil	4.7	4.7	8.7	7.6	5.6	4.4 J	6.8	5.7 J	8.4 J	3.3	4.9	7.8	4.0 J			
Barium	19,000	1,200/82	896	GWP	170.2	170.2	124	140	115	225	139	111 J	99.1 J	91	74.4	125	143			
Beryllium	200	13/3.2	1.63	GWP	0.89	1.63	0.8 J	1.3 J	1.5 J	0.62 U	0.74 J	1.8 J	2.2 U	2.9	4.0	0.99 J	0.54 U			
Cadmium	80	NS/NS	1.4	GWP	0.869	1.4	49.4	8.0	39.8	96.5	106	43.4	121	41.2	10.2	0.28 U	24.1			
Calcium	(j)	NS/NS	NS	NS	38,270 (l)	38,270	38,600	6,510	7,190	13,500	88,200	122,000	152,000	51,900	70,000	4,470	19,100			
Chromium	15,0000	NS/180,000	2,135	GWP	18.61	2,135	311	468	529	392	184	371	930	165	67.3	26.8	374			
Iron	72,000	270/NS	5.76	GWP	14,811	14,811	19,200	22,100	14,200	7,000	18,500	12,800	12,300	9,640	6,990	25,400	25,600			
Lead	80	NS/14	50	GWP	13.59	14	135	101	15.4	16.4	19.1	7.3	6.6	8.0	8.3	14.9	36.9			
Magnesium	(j)	NS/NS	NS	NS	7,146	7,146	2,070 J	819 J	490 J	695 J	4,060	2,830 J	2,230 J	721 J	973 J	7,100	1,650 J			
Manganese	2,300	NS/NS	223	GWP	742 (l)	742	172	36	43	37.7	326	379	155	258	181	404	337			
Nickel	2,000	20/NS	59	GWP	15.71	20	9.4 J	1.7 J	2.9 J	2.1 J	22.3 J	10.7 J	36.6 J	15.1	12	30	5.3 J			
Potassium	(j)	NS/NS	NS	NS	3,393 (l)	3,393	3,220 J	5,350	3,780 J	2,810 J	4,440 J	3,820 J	3,580 J	4,150	1,730 J	2,230 J	3,870 J			
Selenium	510	0.4/0.26	2.0	GWP	1.04	1.04	2.1 U	1.7 J	2.1 U	2.5 U	2.5 U	4.0 J	10.3 J	1.4 J	0.78 U	1.1 J	2.2 U			
Sodium	(j)	NS/NS	NS	NS	289 (l)	289	1,860 J	1,080 J	742 J	773 J	2,350 J	1,290 J	2,400 U	404 J	299 J	310 U	712 J			
Thallium	1	0.0011/0.14	1.6	GWP	NS	0.5	2.9 J	13.1	1.3 U	1.6 U	3.7 J	2.3 U	5.7 U	0.78 U	0.51 U	0.73 U	1.4 U			
Vanadium	520	78/NS	NS	NS	22.68	78	372	382	363	559	204	481	890	482	207	37	280			
Wet Chemistry (mg/kg)																				
Ammonia (as N)	NS	NS	4.15	Subsurface Soil	NS	NS	402	504	196	112	342	412	332	98.1	46.3	49.1	697			
Fluoride	41,000	NS	7.36	GWP	3.95	7	155	165	40.8	157	181	20.5	66.8	3.1 U	4.7 J	43.8	26.5			
Nitrate as N	1,600,000	NS	18.4	GWP	NS	NS	1.2	5.6 J	3.0 U	3.3 U	1.1 J	2.7 U	3.2 U	3.2 J	3.9 J	18.2 J	4.4 J			
Total Kjeldahl Nitrogen	NS	NS	NS	NS	NS	NS	1,580	1,380	380	615	1,250	441	612	313	195	403	1,660			
Total Phosphorus	NS	NS	NS	NS	NS	NS	49,200	52,200	47,200	20,800	67,100	3,020	90,300	139,000	66,000	10,000 U	62,400			
pH	NS	NS	NS	NS	NS	NS	4.16	3.55	3.20	3.10	4.12	6.57	6.75	4.14	5.05	6.39	3.43			
Radiological (pCi/g)																				
Gross alpha	NS	NS	NS	NS	NS	NS	50.9	49.6	222	81	81	106	89	51	5.3	2.39	114			
Gross beta	NS	NS	NS	NS	NS	NS	30.1	36.2	119	45.2	45.6	78	59	52.7	5.7	2.49	66			
Radium-226	5 ^(surface) , 15 ^(subsurface)		5 ^(surface) , 15 ^(subsurface)				7.7	4.98	4.22	3.62	29.4	34.9	16.5	1.46	1.46	1.71	27.8			
Radium-228	15	NS	NS	NS	NS	15	0.9	1.19	1.67	0.95	0.69	0.44	1.1	1.11	0.7	1.25	0.62			

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

NS = No regulatory criteria established.

a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per gram; "n" indicates RSL based on non-carcinogenic toxicity;

"m" indicates RSL may exceed the ceiling limit; "c" indicates RSL based on carcinogenic toxicity; SS indicates surficial soil as the critical pathway;

GWP indicates groundwater is the critical pathway; pci/g = picoCuries per gram; RL = reporting limit

IDTL = Idaho default target level; G = glass; Poly = polyethylene; °C = degrees Celsius; TCL = target compound list;

"NS" = not applicable or standard not developed; SSLs = soil screening levels

UTL 95-95 = upper tolerance limits 95% confidence limit of the 95 th percentile of the distribution

b/ SW-846 source: EPA. 1986. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. As updated and revised.

SM source: American Public Health Association. 1998. Standard Methods for Examination of Water and Wastewater. As updated and revised.

EPA sources: EPA. 1983. Methods for Chemical Analysis of Water and Waste. EPA 600/4-70-020. As updated and revised.

EPA. 1980. EPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water. EPA 600 4-80-032. As updated and revised

HASL source: U.S. Department of Energy. EML Procedures Manual (HASL-300). Environmental Measurements Laboratory. 28th Edition.

ASTM source: American Society for Testing and Materials.

Methods for sample preparation include SW-846 3050B for metals.

ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste with Water, will be used to prepare samples for analysis of fluoride.

c/ Soil Cleanup Criteria in 40 CFR Part 192, <http://www.epa.gov/superfund/health/conmedia/soil/cleanup.htm>

US EPA Regional Screening Levels (revised November 2010), <http://www.epa.gov/region9/superfund/prg/>

d/ Idaho Risk Reduction Manual, July 2004.

e/ US EPA Regional Screening Levels (revised May 2012), <http://www.epa.gov/region9/superfund/prg/>

f/ background as per EPA coresponance dated April 19, 2012, except where noted)

g/Comparative values are defined as:

- the lower of the human health screening levels, unless this value is below background
- if the human health screening level is above background, then it is the CV
- if the human health screening level is below background, then background is the CV

Table D-14

Soil Sampling Analytical Results - 2012 North and South Car Wash Sump Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

- h/ provided by Accutest Laboratories.
- i/ The RSL for diet is reported for cadmium; the RSL for non-diet is reported for manganese.
- j/ To determine potential impacts from the releases, sample concentrations for these parameters will be compared to background concentrations.
- k/ Thallium was not detected in any of the background samples. The laboratory reporting limit was identified as the screening value as the human health values are lower than the reporting and method detection limits.
- l/ Values not provided by EPA; UTL 95-95 concentrations for calcium, magnesium, potassium, and sodium calculated by WSP.
- m/ Radiochemistry labs do not use method detection limits and reporting limits that conventional labs use. Radiochemistry labs only use minimum detection concentrations as shown.

The EPA screening values provided for non-carcinogenic parameters (n) are 1/10th of the published screening levels to account for cumulative adverse effects.

Table D-14

Soil Sampling Analytical Results - 2012 North and South Car Wash Sump Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

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The EPA screening values provided for non-carcinogenic parameters (n) are

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Soil Sampling Analytical Results - 2012 North and South Car Wash Sump Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

EPA Region 9			Idaho Dept. of Environment																					
Regional Screening Levels ^(c)																								
Sample ID:	Industrial	Protection of Groundwater ^(e)	Risk Based	SB-94	SB-94	SB-95	SB-95	SB-96	SB-96	SB-96	SB-97	SB-97	SB-97	SB-98	SB-98	SB-98	SB-99	SB-99	SB-99	SB-99	SB-100	SB-100	SB-100	
Sampling Date:				09/11/12	09/11/12	09/10/12	09/10/12	09/10/12	09/10/12	09/10/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12	
Depth:	Soil (mg/kg)	Risk-Based/MCL-Base	IDTLs (mg/kg)	14-15	19-20	0-1	1-2	0-1	1-2	4-5	0-1	1-2	4-5	0-1	1-2	4-5	0-1	1-2	4-5	8-9	0-1	1-2	4-5	
Metals (mg/kg)																								
Aluminum	99,000	23,000/NS	- (g)	6,970	18,400	7,950	8,750	9,530	3,460	3,820	39,700	35,600	14,000	14,300	16,800	20,600	16,400	17,000	24,300	14,000	15,000	14,800	23,100	
Antimony	41	0.27/0.27	4.8	U	0.49 U	0.43 U	1.7 J	1.9 J	4.0	1.5 J	4.1	5.6 J	2.2 J	1.0 J	1.8 J	0.6 U	3.9 J	3.9 J	4.1 J	2.2 J	1.4 U	0.9 J	3.5 J	2.5 U
Arsenic	1.6	0.0013/0.29	0.39		4.4	4.6	7.4	8.2	2.7	2.3	7.3	4.4	6.8	3.8 J	3.4	9.5	7.6	5.5	3.4	6.8	3.9 J	3.7	7.3 J	
Barium	19,000	1,200/82	896		47 J	139	77.2 J	115	163	35.3	42.2	302	321	274	194	220	359	248	399	233	90.8 J	210	140	249 J
Beryllium	200	13/3.2	1.63	J	0.49 J	0.96 J	0.83 J	0.96 J	0.38 J	0.16 U	0.19 U	0.84 J	0.65 J	0.43 J	0.42 U	0.57 J	0.89 J	0.5 J	0.64 J	0.52 J	1.1 J	0.89 J	0.46 J	1.6 J
Cadmium	80	NS/NS	1.4		1.1	0.22 U	34.2	39.1	15.7	1.0	0.34 J	3.8	0.49 J	102	98.4	15	2.2	42.9	7.0	3.8	58.7	47.8	93.7	52
Calcium	(j)	NS/NS	NS		18,700	4,210	28,200	31,400	2,570	413 J	750 J	696 J	3,980	20,200	9,390	37,000	949 J	14,500	133,000	499 J	78,900	64,100	16,000	176,000
Chromium	15,000	NS/180,000	2,135		34.5	20.9	176	218	156	70.7	58.2	570	378	207	196	292	479	278	1,670	253	306	758	224	526
Iron	72,000	270/NS	5.76		9,220	17,500	8,850	10,900	14,300	4,470	4,640	26,900	21,800	31,200	26,000	36,300	33,800	38,900	76,100	12,200	15,000	31,000	14,200	28,000
Lead	80	NS/14	50		9.0	12.7	28	38.4	11.4	4.8	5.7	13.8	8.7	9.1	5.5	7.2	18.3	8.8	10.9	10.1	5.0	12.0	6.5	25.7
Magnesium	(j)	NS/NS	NS		6,340	6,540	1,240 J	1,310 J	647 J	108 J	107 J	368 J	454 J	949 J	898 J	8,610	236 J	897 J	15,000	294 J	5,460	5,250	492 J	12,700
Manganese	2,300	NS/NS	223		214	652	100	111	39.9	2.9	2.9	32	43	470	359	1,830	66	497	15,900	13.9	590	3,330	83	3,400
Nickel	2,000	20/NS	59		27.2	24.9	13.5 J	17.4	9.4	0.87 J	0.48 J	2.6 J	1.2 J	8.5 J	4.7 J	16.3	2.6 J	7.4 J	62.1	4.6 J	74.6	13.9 J	8.2 J	44.3 J
Potassium	(j)	NS/NS	NS	J	872 J	1,900 J	1,300 J	1,380 J	2,940	1,370 J	1,250 J	8,830	7,000	4,930	3,850 J	2,750 J	11,400	5,840	772 J	5,850	2,100 J	3,260 J	4,970	6,770 J
Selenium	510	0.4/0.26	2.0	U	1.1 J	0.87 U	1.6 U	1.6 U	0.76 J	0.65 U	0.76 U	1.2 J	1.9 J	1.6 U	1.7 U	1.7 J	2.3 J	2.3 J	4.7 J	1.3 J	2.7 U	1.8 U	2.2 J	4.9 U
Sodium	(j)	NS/NS	NS	J	270 U	240 U	1,210 J	1,330 J	482 J	180 U	210 U	310 U	509 J	2,500 J	1,870 J	3,470	290 U	1,760 J	477 J	290 U	750 U	1,060 J	240 U	4,500 J
Thallium	1	0.0011/0.14	1.6	U	0.64 U	0.56 U	1.0 U	1.2 J	4.9	2.1	1.7 J	3.6	1.8 J	11 U	11 U	1.4 J	2.8	14.6	1.1 J	1.2 J	1.8 U	12 U	7.5	16 U
Vanadium	520	78/NS	NS		22.7	23	154	176	186	52.1	26.8	542	476	448	257	282	415	550	265	415	483	367	598	554
Wet Chemistry (mg/kg)																								
Ammonia (as N)	NS	NS	4.15		63.8	29	25	23.6	690	120	139	338	503	478	480	132	626	917	13	478	87	498	818	209
Fluoride	41,000	NS	7.36	J	4.3 J	5.6 J	29.3	31.3	1960	236	35.7	20	21.9	21.1	28	5.3 J	81.6	12.3	27.3	6.1 J	3.8 J	13.6	2.6 U	99.6
Nitrate as N	1,600,000	NS	18.4	J	3.7 J	3.8 J	4.4	5.3	0.57 J	1.3 J	26.5	6.1 J	3.9 J	3.2 U	3.1 U	3.1 J	5.6 J	3 U	13.6	5.5 J	4.1 J	12.2	20.5	42.6
Total Kjeldahl Nitrogen	NS	NS	NS		236	347	225	244	1210	889	268	1,400	907	1,330	1,400	271	2,670	4,600	132	955	343	1,270	1,760	684
Total Phosphorus	NS	NS	NS		6,020	14,200	13,000	10,500	21,800	4,220	6,070	57,700	37,800	272,000	51,100	24,200	64,700	93,200	130,000	49,200	132,000	74,200	54,500	79,600
pH	NS	NS	NS		7.11	6.57	6.44	6.52	4.04	4.03	4.43	2.78	2.76	3.38	3.33	5.06	2.42	3.63	7.70	3.56	5.59	6.20	4.45	6.19
Radiological (pCi/g)																								
Gross alpha	NS	NS	NS		6.4	2.19	72	71	3.97	2.45	17.5	29.4	63	69	56	31.7	32	64	107	31.8	4.8	57	54	54
Gross beta	NS	NS	NS		4	2.27	47.8	43.8	2.2	1.65	14.7	23.3	42	44.9	43.8	26	27.1	54.7	56	18.3	5	43.4	37.4	42.8
Radium-226	5 ^(surface) , 15 ^(subsurface)				2.39	1.37	11.9	12.5	1.23	0.89	9.2	1.92		3.01	2.25	5.2	2.34	13.8	8.4	1.85	0.41	3.83	7.6	12.2
Radium-228	15	NS	NS		1.12	1.15	0.71	0.49	0.76	0.71	0.52	0.84	0.3	0.03	0.25	0.43	1.08	0.34	1.05	0.93	0.54	0.55	0.47	0.53

U = Analyte not detected above method detection limit.
J = Estimated result.
- = Not analyzed.
NS = No regulatory criteria established.
a/ mg/kg = milligrams per kilogram; s.u. = standard units; pCi/g = picocuries per g
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ASTM D3987-85, Standard Test Method for Shake Extraction of Solid Waste
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Table D-14

Soil Sampling Analytical Results - 2012 North and South Car Wash Sump Areas
Nu-West Industries, Inc.
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Soil Sampling Analytical Results - 2012 North and South Car Wash Sump Areas
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID: Sampling Date: Depth:	EPA Region 9 Regional Screening Levels ^(c)		Idaho De of Environme	SB-100	SB-101	SB-101	SB-101	SB-101
	Industrial	Protection of Groundwater ^(e)	Risk Based	09/11/12	09/11/12	09/11/12	09/11/12	09/11/12
	Soil (mg/kg)	Risk-Based/MCL-Base	IDTLs (mg/kg)	8-9	0-1	1-2	4-5	9-10
Metals (mg/kg)								
Aluminum	99,000	23,000/NS	- (g)	30,600	15,700	14,100	9,900	17,600
Antimony	41	0.27/0.27	4.8	1.3 U	0.96 U	1.9 J	0.47 U	1.7 U
Arsenic	1.6	0.0013/0.29	0.39	5.8 J	2.4 J	5.0 J	9.5	2.3 J
Barium	19,000	1,200/82	896	121 J	187	155	67.7	117 J
Beryllium	200	13/3.2	1.63	4.1	0.73 J	1.2 J	1.4	0.91 J
Cadmium	80	NS/NS	1.4	22.1	29.3	41.9	7.5	35.9
Calcium	(j)	NS/NS	NS	17,300	21,200	92,100	124,000	43,900
Chromium	15,0000	NS/180,000	2,135	283	207	218	29.6	204
Iron	72,000	270/NS	5.76	12,400	34,100	14,800	14,900	9,350
Lead	80	NS/14	50	11.9	5.8	19.9	5.6	7.9
Magnesium	(j)	NS/NS	NS	814 J	5,290	4,800	2,940	407 J
Manganese	2,300	NS/NS	223	111	580	323	598	82
Nickel	2,000	20/NS	59	69.3	4.7 J	19.2 J	114	4.6 J
Potassium	(j)	NS/NS	NS	6,480 J	2,560 J	6,260 J	1,280 J	2,330 J
Selenium	510	0.4/0.26	2.0	2.6 U	1.9 U	5.4 J	0.93 U	3.4 U
Sodium	(j)	NS/NS	NS	720 U	2,920 J	3,690 J	341 J	950 U
Thallium	1	0.0011/0.14	1.6	17 U	24 U	1.9 U	0.61 U	2.2 U
Vanadium	520	78/NS	NS	524	262	282	100	454
Wet Chemistry (mg/kg)								
Ammonia (as N)	NS	NS	4.15	496	130	180	103	151
Fluoride	41,000	NS	7.36	10.8	14.4	76.3	2.8 U	3.7 J
Nitrate as N	1,600,000	NS	18.4	9.0	2.9 J	2.8 J	5.2 J	4.4 J
Total Kjeldahl Nitrogen	NS	NS	NS	3,890	912	241	525	133
Total Phosphorus	NS	NS	NS	242,000	61,900	46,300	111,000	154,000
pH	NS	NS	NS	4.48	3.74	5.06	5.43	4.48
Radiological (pCi/g)								
Gross alpha	NS	NS	NS	68	53	53.4	55	40.4
Gross beta	NS	NS	NS	62	38.7	44.2	38.4	24.6
Radium-226	5 ^(surface) , 15 _(subsurface)			3.54	2.94	4.29	2.29	4.35
Radium-228	15	NS	NS	1.53	0.44	1.29	1.32	1.18

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m/ Radiochemistry labs do not use method detection limts and reporting limits th

The EPA screening values provided for non-carcinogenic parameters (n) are

Table D-15

Soil Sampling Analytical Results - 2012 Equipment Blank
Nu-West Industries, Inc.
Conda Phosphate Operations Facility
Soda Springs, Idaho

Sample ID:	EB0911A12	EB0911B12
Sample Type:	INVE	INVE
Sampling Date:	9/11/2012	9/11/2012
Depth (feet):	-	-

Metals (mg/l)

Aluminum	0.025 U	0.025 U
Antimony	0.0039 J	0.020 U
Arsenic	0.0020 U	0.0020 U
Barium	0.0050 U	0.0050 U
Beryllium	0.0010 U	0.0010 U
Cadmium	0.0010 U	0.0010 U
Calcium	0.10 U	0.10 U
Chromium	0.0010 U	0.0010 U
Iron	0.035 U	0.035 U
Lead	0.0010 U	0.0010 U
Magnesium	0.10 U	0.10 U
Manganese	0.0010 U	0.0010 U
Nickel	0.0020 U	0.0020 U
Potassium	0.50 U	0.50 U
Selenium	0.0020 U	0.0020 U
Sodium	1.9 U	1.9 U
Thallium	0.0019 U	0.0019 U
Vanadium	0.0010 U	0.0010 U

Wet Chemistry (mg/l)

Ammonia (as N)	0.050 U	0.050 U
Fluoride	0.050 U	0.050 U
Nitrate as N	0.090 J	0.089 J
Total Kjeldahl Nitrogen	0.11 U	0.11 U
Total Phosphorus	0.028 U	0.093 J
pH	6.73	6.60

Radiological (pCi/l)

Gross alpha	-	-
Gross beta	-	-
Radium 226	-	-
Radium 228	-	-

U = Analyte not detected above method detection limit.

J = Estimated result.

- = Not analyzed.

INVE = Investigative sample.